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Products, News & Information Data Centers Can Trust. Since 1979

Tracking Down Power Hogs

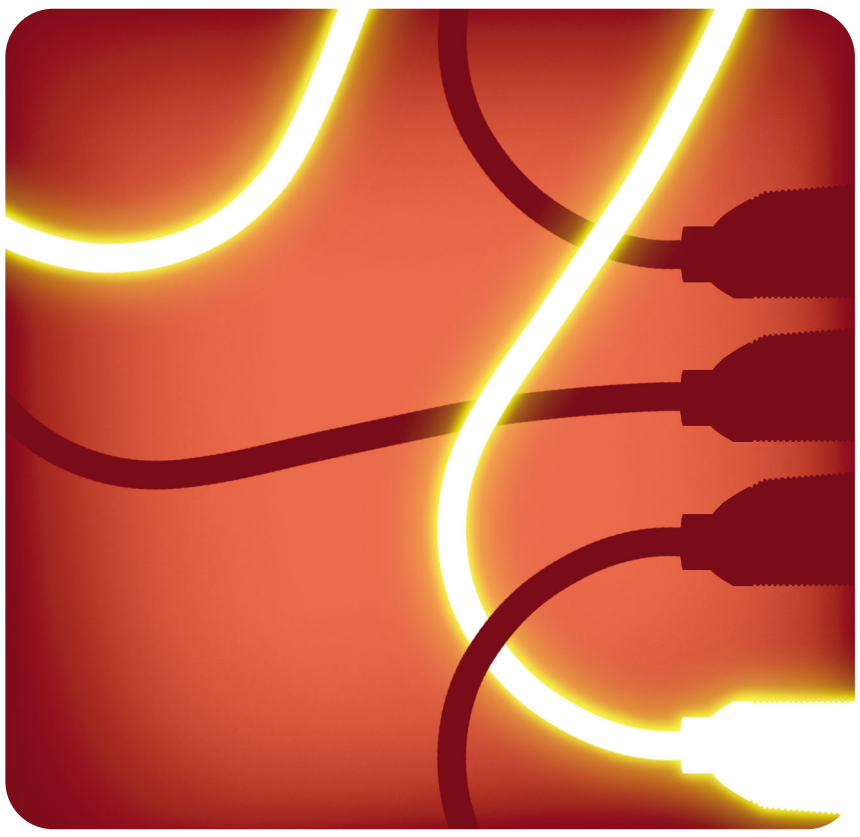
Ways To Find What's Wasting Energy In Your Data Center

by Christian Perry

• • •

WITHIN THE AVERAGE data center lurks a menacing beast that attacks utility bills with all the ferocity of a lion at feeding time. Known as the "power hog," this creature stealthily assumes the form of servers, power quality systems, and other equipment, in turn preventing data center personnel from easily detecting their electricity-sapping presence.

"Identifying power-hungry equipment is not as easy as it sounds," says Chris Loeffler, data center solutions application manager at Eaton (877/785-4994; www.eaton.com). "The typical data center may have thousands of individual 'loads,' which can be misleading as far as their purpose and how they are used by the business."



Although it's difficult to gauge the money that can be saved from finding and eliminating power hogs—some data centers might have a few hogs, while others could have hundreds—there's no denying that their demise can have an immediate positive impact on the bottom line. But hog hunting requires careful assessment and follow-through, say experts.

Inventory Insight

Without detailed knowledge of all the equipment in a data center, it's impossible to know much of anything about the power draw of devices, let alone which devices are con-suming excess power. Roberto Gill, systems support business leader with MasterCard Worldwide, recommends taking inventory of all the different models of servers and network hardware and matching each model with its vendor-provided power and cooling utilization numbers, which generally can be found on vendor Web sites.

Go to Page 10

Top Backup Problems & How To Avoid Them

Don't Let These Snares Trip Up Your Enterprise

by Robyn Weisman

• • •

BACK IN THE halcyon days when 1GB seemed an unconscionable amount of space and Sarbanes-Oxley was just a glimmer in some lawmaker's mind, IT managers dealt with backups mostly by buying locally attached storage, typically tape-based, and using hanging files of paper documents.

These days, backing up data is significantly more complex and risky. Here are a few key backup problems SMEs face and ways either to avoid them or solve them.

Problem: Your Backups Are Breaking Your Storage Budget

Today, SANs, offsite storage, and virtual machines have all contributed to obfuscating storage environments. Moreover, great fat applications such as Oracle's Application Server (www.oracle.com), Microsoft Exchange (www.microsoft.com), and Microsoft SQL Server tend to grab all the gigabytes they can, says Rick Clark, CEO of APTARE (www.aptare.com), an enterprise storage software provider.

"These applications lay down their proprietary file system atop the existing OS. In Windows Server, they will grab the C or D drive, and if you want to find out what they're really using, you have to really drill into them," Clark says. Meanwhile, he says that the storage people are asking for a large amount of additional space each month, which can break the IT budget, while having no idea how the storage is

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Once you have a clear idea of how your storage is being allocated, you can then reclaim unused storage.

In This ISSUE

COVER FOCUS

Data Center Project How-Tos

We give you the information you need to get started with several key data center tasks and follow them through to implementation.

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Avoiding Top Backup Problems | 1

Backing up data is complex and risky. Here are a few key backup problems SMEs face and ways either to avoid them or solve them.

Strategies For Setting Spam Filters | 25

A few guidelines can help you to establish a sound strategy that meets your users' needs while providing the necessary protection.

New Security Strategies | 26

Security manufacturers are constantly inventing new ways to secure the enterprise. It seems like new strategies, technologies, and product combinations are hitting the market every day.

FTP Virtualization | 27

As Web browsers and file managers can connect directly to FTP servers, increasingly, organizations are considering adding FTP into the folds of virtualized environments.

Product Releases | 17

■ **Barracuda Networks** launched the Barracuda Spam Firewall 1000. ■ **Certeon** launched its aCelera Virtual Appliance software to provide a nonproprietary virtual appliance for application acceleration. ■ **Check Point Software** released ZoneAlarm ForceField, software that creates a virtualized browser session. ■ **Dekart** released the latest version of its Dekart SIM Explorer, an intelligent cell phone card processing tool. ■ **MPC Computers** announced expansion shelves for the DataFRAME 2112 SAN appliance to enable customers to increase their SAN environment with flexibility. ■ **Neocleus** announced Neocleus Trusted Edge to provide a means for employees, partners, and customers to connect to corporate resources from any endpoint. ■ **Netreo** announced its new traffic monitoring system, OmniCenter Flow, which allows IT managers to gain visibility into network traffic patterns to better allocate network resources and costs. ■ **Sonasoft** unveiled a new version of SonaSafe Suite, which includes new features such as mailbox backups, customized ports, and improved replication and recovery capability.

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1. What is the size of your company (how many employees)?

☐ Less than 10 ☐ 200 to 499
☐ 10 to 99 ☐ 500 to 999
☐ 100 to 199 ☐ 1,000+

2. How often do you purchase computer hardware/software?

☐ Weekly ☐ Quarterly
☐ Bi-weekly ☐ Annually
☐ Monthly ☐ No Involvement

3. What is your annual computer hardware/software purchasing budget?

☐ $0 to $9,999 ☐ $100,000 to $249,999
☐ $10,000 to $24,999 ☐ $250,000 to $499,999
☐ $25,000 to $49,999 ☐ $500,000 to $999,000
☐ $50,000 to $99,999 ☐ $1,000,000+

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Ethernet Converter

Transition Networks GFEB Series Provides Easy Integration

AS A COMPANY GROWS, the need for flexibility and functionality increases, and so does the need for products that will accompany the growth and change. In the past, some Ethernet converters haven't had enough ports or haven't been cost-effective. Transition Networks has set out to solve this problem with the new GFEB series of 10/100/1000 Ethernet converters.



GFEB series products provide an easy way for companies to integrate legacy 10/100 UTP devices into a Gigabit Ethernet fiber network. Also, network administrators have new enhanced features that increase functionality and network management capabilities.

The new GFEB-120 series of 10/100/1000Base-T to 1000Base-X Ethernet copper-to-fiber media converters replaces Transition's GFEB-100 series of media converters. With the new product line, customers benefit from new features such as bandwidth allocation, virtual cable test on UTP port, IEEE 802.1q VLAN tagging and double tagging (Q in Q), IEEE 802.1P QoS, IPv4 Tos/DiffServ, IPv6 traffic class, port-based VLAN to allow unidirectional transmission, RMON counters for each port, Digital Diagnostic Monitoring interface, and the ability to remotely update firmware.

These new converters are fully compatible with the previous models and also include those features found on the GFEB-100 series, including AutoCross, AutoNegotiation (both UTP and fiber ports), Link Pass Through, Pause, Automatic Link Restoration, and switch-selectable speeds.

Transition GFEB Ethernet Converter

Provides an easy way to integrate legacy 10/100 UTP devices into a Gigabit Ethernet fiber network

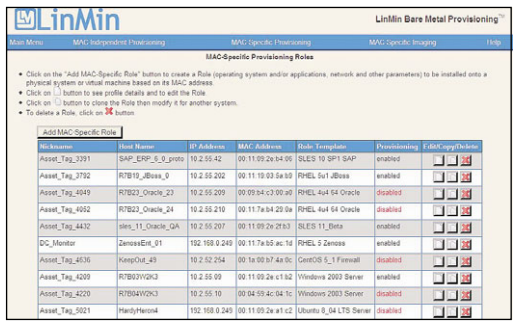
(800) 526-9267

www.transition.com

TRANSITION NETWORKS

Remotely Deploy Linux & Windows Systems

LinMin Bare Metal Provisioning Makes It Easy



LinMin Bare Metal Provisioning 5.1 lets you perform remote, unattended installs of several OSes.

LINMIN BARE METAL PROVISIONING 5.1 simplifies the unattended deployment of systems and virtual machines on new platforms and adds "green" features and innovative provisioning business rules.

With LBMP 5.1, you can perform remote, unattended installations of Red Hat, Novell, Microsoft, Ubuntu, CentOS, Fedora, and Asianux OSes and applications onto servers, blades, PCs, appliances, and virtual machines. LBMP gives IT staff system control with Fire And Forget Provisioning, while also simplifying one-off or mass system deployments with On The Fly Provisioning.

Install LBMP, upload your Linux and Windows DVDs and CDs, and create system roles such as Novell SLES 10 with SAP or Microsoft Windows Server.

With Fire And Forget Provisioning, you assign system roles to systems with unique network settings, host name, and passwords. Specify the provisioning rule such as Always, Never, Boot To HD (to avoid accidental repurposing), or Provision Only At Next Network Boot, Then Boot To HD (to prepare systems and provision them during the next network boot).

On The Fly Provisioning lets you select the system role from the client's UI or assign a default role for all unknown PXE boot requests.

LBMP also captures and restores entire disk images to help with disaster recovery and to reduce energy consumption by parking power-hungry systems unless needed. Once provisioned by LinMin, systems are turned over to your systems management infrastructure.

LinMin Bare Metal Provisioning 5.1

Starts at $250 or $100/year for 10 systems

Reduces time and cost to deploy or repurpose Linux and Windows servers, blades, and virtual machines

www.linmin.com

LinMin

Agentless Information Recovery Management

Televaulting 8.0 Provides A Next-Generation Platform For Information Recovery

IT PERSONNEL certainly have their hands full with the escalating amount of information stored on networks, server consolidation, compliance, security, and disaster recovery issues always looming. Legacy backup and recovery technologies don't always have what it takes to ensure organizations can map IT processes, reduce IT costs, retain data long-term, and maintain business continuity. So, organizations are turning to agentless information recovery management platforms, such as Televaulting 8.0 from Asigra.

In addition to providing agentless information recovery management, Televaulting 8.0 offers backup and recovery of VMware ESXi, and its intelligent archiving feature provides policy-based backup life cycle management and long-term data retention, while cutting the costs of hardware storage. The multidirectional data center replication supplants storage-storage replication and supports one-to-one, many-to-one, and many-to-many replications. Organizations will have room to grow in both capacity and performance with DS-Client grid-based scalability. Also, Televaulting 8.0 supports SAP, SharePoint, Oracle, Microsoft SQL, DB2, Exchange, Lotus Notes, GroupWise, and others.

With Televaulting 8.0, IT outsourcers and organizations get integrated information recovery management from the data center to the remote office, along with potential solutions for performance loss, manual deployment, burdensome software and information management, limited cross-platform interoperability, and security problems. The nonintrusive platform behaves as a data recovery services "blade" in the outsourcer's, providing capital and operational cost reductions and allowing for the removal of software agents that have damaging impacts. As the only 64-bit agentless information recovery management platform, Televaulting 8.0 offers a centralized approach to agent-based patchwork solutions.

Asigra Televaulting 8.0

Starts at $14,000

Provides data protection and recovery from the data center to the remote office

(416) 736-8111

www.asigra.com

asigra

NETWORKING & VPN

JUNE 6, 2008

Keeping Track Of Names, Not Numbers

eTelemetry's Locate 4.1 Gives Administrators Name-Based IP Address Tracking Capabilities

IT CAN BE DIFFICULT to track users on a network when their only identifying mark is an IP address. Locate 4.1, eTelemetry's network appliance for IP mapping, makes it significantly easier by attaching people's names to IP addresses, MAC addresses, and switch ports.



The appliance makes it easier and faster to locate devices, users, and connections and helps administrators react more proactively to network threats.

Keeping track of ports and addresses by name enables network forensic tracking to account for employee network activity. With configurable alerts, administrators can detect rogue Wi-Fi networks and receive notices so they can react in a timely manner.

Other features include Endpoint Visibility, which lets administrators acquire email, instant messaging, and switch port information from unauthorized users and quickly identify and shut them down, and Instant Assist, which help desk staff can use to locate a user's network by name and, with a one-click connection, implement Remote Desktop and Remote Assist.

With Locate 4.1, visibility is possible even without a centralized network, and security and identity management features will still benefit a system without a network operating system.

Locate 4.1 works with any wired or wireless network, features plug-and-play installation, and works from a mirrored port to avoid impacting network performance.

Locate 4.1

$7,495

Provides easy name-based tracking and management of IP addresses on the network

(888) 266-6513

www.etelemetry.com

LOCATE by eTelemetry

SECURITY

JUNE 6, 2008

A Secure Virtual Data Container



QuickVault's JumpVault Gives Mobile Devices Powerful Security Features

MOBILE DEVICES are becoming more ubiquitous every day. However, what they gain in convenience they can lose in security. It's common to misplace a mobile device. In either loss or theft, data should be both protected from possible breaches and also able to be disabled remotely.

QuickVault's JumpVault turns nearly any mobile device into a secure, virtual container of information. Size doesn't matter; JumpVault can secure a device with any size internal flash memory. As an added security bonus, the virtual container can be disabled remotely so that the stored data is effectively locked down from any potential breach. Essentially, JumpVault is designed to extend the controlled and secure IT environment to the mobile user.

JumpVault virtual containers are password-protected with built-in 256-bit encryption, remote authentication of devices and users, and meta data logging to keep track of any data movement. When configuring the virtual container, users can include or exclude any files or folders. Supported operating systems include WinXP and Vista, Mac OSes, and Linux. Users can also schedule daily, weekly, or monthly backups and set backup rules. Setup is designed for ease of use and includes drag-and-drop capabilities. JumpVault also automatically compresses files.

QuickVault's servers facilitate a number of functions of JumpVault, including meta data logging and remote data transfer. JumpVault is preconfigured to authenticate with QuickVault's servers, so connection is both simple and secure.

QuickVault JumpVault

Basic Edition: $34.99; Professional Edition: $129.99; 12-month subscription to Remote Security: $60

Provides multilayered security for mobile devices

(404) 735-4443 (volume sales only)

www.jumpvault.com

JumpVault

SERVICES

JUNE 6, 2008

Protect Your Data & The Planet

Kroll Ontrack Offers IT Media Disposal Programs

PROPERLY DISPOSING OF and recycling hardware is an important component in protecting the environment. Especially when dealing with hardware that contains sensitive data, it can be unclear how individuals and organizations should dispose of and recycle materials in the way that protects the data and is environmentally friendly.

Kroll Ontrack recognizes the importance of implementing green initiatives, so it wants to lend a hand to individuals and organizations that would like to find more ways to reduce their environmental impact. The services the company offers protect both vital data and the environment—a win-win situation.

Kroll Ontrack is offering media erasing services to help individuals and organizations discard end-of-lifecycle hard drives. Ontrack Eraser software uses overwriting methods to permanently remove data. Ontrack Eraser services, which Kroll Ontrack specialists perform, provide comprehensive removal of data. Kroll Ontrack specialists use a degausser, a hardware tool that wipes out data using magnetic fields.

The services dispose of certain media by disassembling the good parts for reuse before discarding the storage media. Kroll Ontrack's recycling vendor takes the other parts of the hard drives and storage devices and divides the leftover material into groups, such as metals, circuit boards, copper wiring, and aluminum. These materials are then recycled and reused for other products. Even the components left over are not dumped into landfills or incinerators. Instead, a combination of physical and mechanical demanufacturing methods are used to split up harmful materials from recyclable parts.

Kroll Ontrack Media Disposal Program

Media disposal program protects sensitive data and the environment

(800) 872-2599

www.ontrackdatarecovery.com

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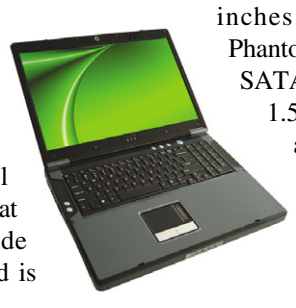
CLIENTS

MAY 30, 2008

Server Power, Laptop Portability

Eurocom's D90xC Phantom-X Mobile Server Provides Powerful Computing On The Go

THE NEED FOR POWERFUL, server-caliber computing in settings other than a typical office is a large and crucial one. Eurocom addresses this market with its D90xC Phantom-X Mobile Server, a powerful PC in a laptop form factor that weighs just 12 pounds.



The D90xC Phantom-X is a 64-bit system that operates on Intel quad-core Xeon processors running at 2.83GHz with 1,333MHz frontside bus and 12MB of L2 cache. Speed is further facilitated by up to 8GB of DDR2-800 memory.

Although measuring 11.9 x 15.8 x 2.05 inches (HxWxD), the D90xC Phantom-X supports up to three SATA-300 hard drives for up to 1.5TB of storage. Users can also choose between RAID 0, RAID 1, or RAID 5 configurations.

Other features include a 17-inch display, a one-hour backup battery in the event of a power failure, and a rewriteable Blu-ray drive. The keyboard is a full 102-key desktop-type board with a separate numeric keypad. Wireless options include built-in 802.11a/g/n WLAN, as well as Bluetooth.

The D90xC Phantom-X also features a number of I/O ports, including a Gigabit Ethernet LAN with an optional second Gigabit Ethernet port via a PC Express slot. The computer also features four USB 2.0 ports, FireWire, serial and parallel ports, and CRT and DVI-D ports to power up to two additional external displays.

The D90xC Servers are customizable, and the hard drives, memory, optical drives, processors, and graphics are upgradeable.

Eurocom D90xC Phantom-X Mobile Server

$2,454

Server-caliber computing power in a laptop form factor

(877) EUROCOM

www.eurocom.com

EUROCOM

MarketPlace NEWS



Yahoo! Postpones Board Meeting

YAHOO! HAS POSTPONED the annual meeting of its board of directors. The meeting, originally scheduled for July 3, will now take place sometime near the end of July, although no specific date has yet been set. It's widely speculated that the decision to delay the board meeting is an attempt to buy more time for Yahoo! to work out a deal with Microsoft or another partner and to avoid a showdown with investor Carl Icahn, who has been purchasing Yahoo! shares and plans to nominate his own slate of board members. Yahoo! also announced it will reduce the size of its board of directors to nine members after the resignation of board member Edward Kozel.

Government's Overall Information Security Improves

ON THIS YEAR'S information security report card, which covers 2007, the federal government received an overall C grade, an improvement over the C- grade it received for 2006. U.S. Rep. Tom Davis (R-Va.), who authored FISMA (the Federal Information Security Management Act), rated the 24 government agencies according to how they comply with the Act. Four agencies received A+ grades, including the Environmental Protection Agency and the Department of Justice, while nine were given failing grades, including the Departments of Veterans Affairs, Defense, and Agriculture. Some critics have expressed skepticism over whether the report card truly portrays whether the agencies are prepared for cyber threats.

RFID Market Expected To Grow

OVER THE NEXT five years, the RFID (radio frequency identification) market will likely see growth of about 15% each year, according to a study by ABI Research. The research firm, based in Oyster Bay, N.Y., also predicts that by 2013, the RFID market will be worth $9.7 billion. RFID technology use by major corporations, such as Wal-Mart and Airbus, will help boost growth. In a statement, ABI analyst Michael Liard said, "Across all product categories and flavors of RFID technology, market trends continue to be positive. We saw a strong finish to 2007, which continued into a healthy first quarter 2008."

HP's Q2 Profits Up

HP REPORTED that strong sales overseas have helped the company post an increase in profits during the second quarter. Overseas sales accounted for 70% of the company's sales during Q2, resulting in the company benefiting from the strength of foreign currency compared to the American dollar. HP reported profits of $2.1 billion for the second quarter, which is up 16% compared to the same quarter last year. The quarter's operating profits were $2.6 billion, or 80 cents a share. Sales were $28.3 billion, up 11% from a year ago, which represents a growth rate of 5% after adjustments are made for fluctuations in currencies.

38 Charged In Phishing Scheme

U.S. AND ROMANIAN authorities are charging 38 people from both the United States and Romania for their participation in Internet phishing schemes. The two related schemes, which have been tied to organized crime, led to the theft of credit and debit card numbers from thousands of victims. Indictments were filed in the U.S. District Court for the Central District of California and the District of Connecticut. In the Los Angeles case, charges include conspiracy to violate the Racketeer Influenced and Corrupt Organizations Act, conspiracy in connection with access devices, and bank fraud. In the Connecticut case, seven Romanian residents have been charged with using a phishing scheme to commit fraud in connection with access devices, conspiracy to commit bank fraud, and aggravated identity theft.

Quad-Core Itanium Ready In 2009

INTEL SAYS A quad-core version of its Itanium chip, a 64-bit chipset meant for high-end servers, will be available early next year. The new chip, code-named Tukwila, will be one of the first monolithic quad-core versions from Intel, meaning all four cores are on a single die, similar to AMD's Barcelona chipset. The Tukwila will have more than 2 billion transistors and will also feature 30MB of cache memory and an integrated memory controller. It will initially be available in clock speeds of up to 2GHz.

Belgian Newspapers Sue Google

A GROUP OF Belgian newspapers filed a court summons asking Google to pay the group up to $77.5 million in damages for violating copyright law. The Copiepresse group says Google violated its copyrights by caching Web pages and publishing articles on the Google News site. Copiepresse originally filed suit in 2006, and Google was ordered to remove the Belgian news sites from its Google News and search sites. The two groups have been in settlement negotiations since early 2007, but the negotiations have now failed, according to a Copiepresse representative. A Google spokesperson says the company is still appealing the copyright violation ruling and that the new claim for past damages is groundless.

Judge Rules Dell Used Deceptive Practices

LAST YEAR, New York State Attorney General Andrew Cuomo sued Dell on behalf of hundreds of customers who said the company enticed them into buying its products by advertising appealing deals and promotions. The majority of them were denied or deceived into thinking they were approved for low interest or financing rates. They also alleged that Dell deprived them of technical support to which they were entitled. Now State Supreme Court Justice Joseph Teresi has ruled that Dell used a "bait-and-switch" scheme to increase sales and failed to deliver on its low financing promises. Further court proceedings will determine what restitution Dell will pay.

Dell's Revenue & Earnings Increase

DELL REPORTED strong first quarter results in several areas, including revenue, earnings, and product shipments. The company's first quarter revenue of $16 billion was up 9% compared to a year ago; earnings per share were 38 cents, up 12% year over year; and product shipments increased 22%, primarily because of strong server shipments. For the first time, Dell's quarterly revenue from outside the United States surpassed revenue from the United States. Dell also reported that during the past year, its employee headcount has dropped by 7,000, although it's added about 2,700 employees through acquisitions.

Microsoft Announces Latest Windows 7 News

ACCORDING TO an announcement on a Microsoft blog, Windows Vista's successor, Windows 7, will use multitouch software from the company's Surface tabletop computer to give desktop and notebook users touchscreen capabilities. The touch technology, which is similar to the touchscreen features available on Apple's iPhone, will let PC users perform a number of functions using their fingers, including zooming in and out of photos, drawing pictures on-screen, and searching maps. During an interview at *The Wall Street Journal*'s All Things Digital Conference, Microsoft Chief Executive Steve Ballmer said Windows 7 will be available late next year.

Server Sales Rise Despite Increase In Virtualization

ANALYST FIRM Gartner reported that server sales and shipments posted gains in the first quarter of the year compared to last year, even with growth in virtualization implementations. A total of 2.3 million servers were sold in the first quarter, up 7.6% from 2.1 million in the first quarter of last year. Garter attributes the gains to the growing use of Web servers, which are more difficult to virtualize, and the purchase of new, larger servers to replace older hardware for hosting virtualization.

China & U.S. Lead In Internet Attacks

A REPORT RELEASED by content distribution company Akamai claims that China and the U.S. lead the world as the two biggest sources of Internet attack traffic. According to the report, almost 17% of Internet attack traffic originated from China, and 14% came from computers based in the United States. The most common attacks noted were those targeting Microsoft Windows, and a third of the attacks were on port 135, used for remote procedure calls in Windows. Of the countries studied, 10 accounted for nearly 75% of all attacks; included in the top 10 were Argentina, Brazil, Japan, and India.

WATCH THE STOCKS

This information provides a quick glimpse of current and historical stock prices and trends for 14 major companies in the technology market.

Company	Symbol	Year Ago	May 23 $	May 30 $	% change from previous week
Computer Associates	CA	$26.38	$25.10	$26.54	▲ 5.74%
Cisco Systems	CSCO	$26.40	$25.10	$26.72	▲ 6.45%
Dell	DELL	$26.22	$21.19	$23.06	▲ 8.82%
Electronic Data Systems	EDS	$28.65	$24.34	$24.49	▲ 0.62%
Google	GOOG	$498.60	$544.62	$585.80	▲ 7.56%
HP	HPQ	$45.67	$44.96	$47.06	▲ 4.67%
IBM	IBM	$106.93	$124.20	$129.43	▲ 4.21%
Intel	INTC	$22.08	$23.41	$23.18	▼ 0.98%
McAfee	MFE	$36.09	$35.67	$36.25	▲ 1.63%
Microsoft	MSFT	$31.11	$28.05	$28.32	▲ 0.96%
Oracle	ORCL	$19.42	$21.98	$22.84	▲ 3.91%
Red Hat Software	RHT	$22.95	$23.50	$24.36	▲ 3.66%
Sun Microsystems	JAVA	$5.12	$12.81	$12.95	▲ 1.09%
Symantec	SYMC	$19.77	$20.66	$21.73	▲ 5.18%

NOTE: This information is meant for reference only and should not be used as a basis for buy/sell decisions.

Upcoming IT Events

- JUNE -

ITEC Seattle
June 10-11
Seattle, Wash.
www.goitec.com

Microsoft TechEd 2008
June 10-13
Orlando, Fla.
www.microsoft.com/events/teched2008

AITP Central Idaho
June 11, 11:45 a.m.
The Owyhee Plaza
1109 Main St.
Boise, Idaho
www.boisestate.edu/dpma
/dpmaci/meetings.html

HP Technology Forum & Expo
June 16-19
Las Vegas, Nev.
www.hptechnologyforum.com

ISSA Puget Sound
June 16, 5:30 p.m.
Olympic Room, Microsoft Main Campus
Building 27
3009 157th Place NE
Redmond, Wash.
www.issa-ps.org

NXTcomm
June 16-19
Las Vegas, Nev.
www.nxtcommshow.com

ITEC Indianapolis
June 17-18
Indianapolis, Ind.
www.goitec.com

ITEC Charlotte
June 25-26
Charlotte, N.C.
www.goitec.com

- JULY -

AITP Central Idaho
July 9, 11:45 a.m.
The Owyhee Plaza
1109 Main St.
Boise, Idaho
www.boisestate.edu/dpma
/dpmaci/meetings.html

ISSA Puget Sound
July 18, 5:30 p.m.
Olympic Room, Microsoft Main Campus
Building 27
3009 157th Place NE
Redmond, Wash.
www.issa-ps.org

SANSFIRE 2008
July 22-31
Washington, D.C.
www.sans.org

National Institute of Governmental Purchasing
July 26-30
Charlotte, N.C.
www.nigp.org/Events/Forum.htm

- AUGUST -

LinuxWorld Conference & Expo
August 4-7
San Francisco, Calif.
www.linuxworldexpo.com

CompTIA Breakaway Conference
August 5-7
Orlando, Fla.
breakaway.comptia.org

Next Generation Data Center
August 4-7
San Francisco, Calif.
www.ngdcexpo.com

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Keep Cold Air Where It Belongs

Upsite KoldLok Floor Grommets Help ViaWest Keep Airflow Management Under Control

by Sue Hildreth

• • •

OPERATING A DATA CENTER that is energy-efficient requires careful planning, best practices, and some often complex new technologies. But the ultimate goals are often pretty fundamental—such as keeping the cold air from seeping out through the bottom of the floor.

That's the problem that Todd Gale, the Colorado regional data center manager for ViaWest (www.viawest.net), a server hosting and colocation company with data centers in several U.S. states. The data centers have raised floors, with cables running from the power outlets under the floors into the cabinets and equipment racks above. Unfortunately, the hole that allows the power cables in also enables cold air to pour out and thereby circulate in a way that is not making best use of it.

"As heat loads increase in data centers, you want very tight management of where the cold air is being let out of the floor, so the placement of the perforated tiles in the floor has to be very precise. You only want the cold air coming out where you've placed a perforated tile. But when you cut a hole in the floor tile for the cable, that is now dumping a tremendous amount of cold air into the bottom of the cabinet," says Gale.

He notes that precision management of air movement is even more important in hot aisle/cold aisle designs.

Stopping Air Loss

Because all ViaWest data centers run the power cabling under the floor, the problem of lost air was widespread. The company needed a way to keep the cold air from seeping out through the cable apertures. The solution, says Gale, was to invest in the KoldLok Integral Raised-Floor Grommet, made by Upsite Technologies (888/982-7800; www.upsitetechnologies.com) in Santa Fe, N.M.

The KoldLok grommets are made to fit inside holes cut in the floor tiles, or they can be mounted into an inset on one edge of a tile. The grommets come in different sizes, with the one used by ViaWest fitting into a 1- by 1-foot opening cut into a 2- by 2-foot floor tile, West notes.

All of the KoldLok grommets feature a self-sealing, multilayer airflow closure system. The grommets use two opposing arrays of filaments—3,100 filaments per cross-sectional inch—to control airflow without embedding the cables.

"KoldLoks are important for making sure the cold air is going exactly to where you need it and making sure you're delivering the right temperature. We use them throughout ViaWest," says West.

The KoldLok grommets come in several models. There is the KoldLok Integral Grommet, which sits into holes cut into raised floor tiles; the KoldLok Surface Mount, which can be fitted on top of existing openings that can't be cut to size for an Integral Grommet; and the KoldLok Extended Grommet, which is an extra-long model that can seal a cutout of up to 24 by 7 inches.

In March 2008, Upsite also unveiled its HotLok Blanking Panel, a snap-in/pull-out stackable blanking plate for IT equipment cabinets.

The Blanking Panels are designed to provide an effective seal for optimized cooling capacity within a server cabinet and to thereby reduce energy consumption and the carbon footprint of the data centers. The stackable, lightweight plastic panels can be kept on hand in a particulate-free storage environment and are recyclable.

ViaWest outsources the ordering and prepping of its floor grommets and floor tiles to equipment maintenance firm DP Guardian (www.dpguardian.com) in Sheridan, Colo. DP Guardian orders the required floor tiles and grommets, does the dirty work of cutting openings into the tiles and installing the grommets, and then ships the final product to ViaWest. By outsourcing the tile cutting and grommet installation work, ViaWest saves itself from the administrative overhead involved in purchasing and the cleaning of dirt and tile dust that would come from cutting tiles in-house.

Instead, ViaWest simply orders a few more floor tiles whenever one of its hosting customers wants to expand an existing colocation area or purchase a new one.

Optimal Airflow

Gale notes that, as energy costs rise along with the heat output of dense servers and cabinets, the need for optimum cooling and monitoring systems is becoming crucial. The old days of running freezing-cold computer centers are gone, he says, although many data centers still run too cold at 68 or 70 degrees Fahrenheit.

"There is a lot of new data that indicates that a server can operate just fine at a higher temperature," he says, noting that ViaWest keeps its data centers in the range of 72 to 74 F. "It's not about being cold but about being consistent."

Consistency also prevents hot spots in the cabinets. The optimal flow is for cold air to pass down the cold aisle and past the air intakes of the equipment. Unfortunately, a lot of design flaws—such as gaps for cabling—interrupt that optimal airflow.

According to a survey conducted by data center research firm the Uptime Institute and sponsored by Upsite Technologies, much of the cooling effort expended in the average computer room is wasted. The study looked at the actual cooling conditions within 19 different computer rooms, ranging from 2,500 square feet to 26,000 square feet. It found that approximately 60% of the cold air was bypassing the air intakes and going elsewhere—with more than half of that wasted air going down cable outlets into the floor. Despite the fact that the computer rooms operated 2.7 times more cooling equipment then technically required, only 40% of the cold air was reaching the servers.

"In a well-run data center, it all ties together to where the movement of the air is very precise," says Gale.

Upsite Technologies KoldLok Integral Raised-Floor Grommets

Self-sealing closers for preventing cold data center air from escaping through the floor

"As heat loads increase in data centers, you want very tight management of where the cold air is being let out of the floor. KoldLok Floor Grommets help to do that," says Todd Gale, the Colorado regional data center manager for ViaWest (www.viawest.net).

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Energy-Efficient Strategies For The Data Center

Besides controlling the airflow via grommets, ViaWest (www.viawest.com), a server hosting and colocation company based in Denver, Colo., is considering other ways to make its data centers more energy efficient.

Lighting is one area where energy usage can be reduced, for instance. Todd Gale, Colorado regional data center manager for ViaWest, says the company is looking into more energy-efficient lighting fixtures, as well as investing in automated lighting management that will turn off lights when no one is in a room.

Variable frequency drives, or VFDs, are another "green" data center technology that ViaWest has been considering. A VFD is an adjustable speed drive in which the current to power the motor is slowed or sped up, depending upon the need. This can save energy in data center cooling equipment, such as air compressors and air handlers.

Free cooling is another strategy for reducing energy use. Because data centers are often warmer than the outside weather, free cooling systems take advantage of that by maintaining an outside water cooler and heat exchanger to make use of the outdoor water's colder temperature. It's most useful in cooler climates, of course.

"In Colorado, I can take cold from the outside and bring it inside nearly six months of the year," says Gale.

He is also investigating best practices and benchmarks for all areas of data center efficiency. In his view, optimizing the energy efficiency of the data center is a key aspect of ensuring overall operational efficiency.

"Operating efficiency is what I measure on. It also happens that just about everything that makes you more operationally efficient saves you on energy costs. So it's good for the environment, as well," he says.

Regulating Electronic Communications

Archive Messages With Akonix's L7 Enterprise For The BlackBerry Enterprise Solution

AS PROFESSIONALS USE ELECTRONIC communications more and more, organizations must look for ways to supervise and archive this type of communication to prevent fines and legal sanctions.

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The L7 Enterprise provides thorough electronic message storage by integrating with LDAP directories, such as BlackBerry Enterprise Server, Microsoft Active Directory, and email archive platforms, such as EMC EmailXtender, HP Integrated Archive Platform, and Symantec Enterprise Vault. L7 Enterprise provides multiple real-time communications from a single console and the ability to apply and enforce policy through other L7 Enterprise modules available for enterprise and public IM, online conferencing, server-based fax, and VoIP. It will be available as an add-on module for Akonix's A1000 and A6000 appliances or as a Windows Server software module.

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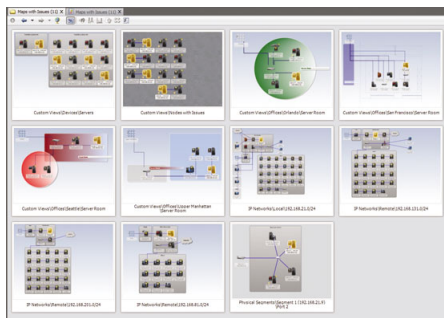
Manage Network Events With AdRem Software's NetCrunch 5

NETWORK MONITORING can be a complicated set of processes. Simple, clear-cut solutions are hard to find, which is why AdRem Software developed NetCrunch 5, a network monitoring solution for SMEs.

NetCrunch 5 boasts the inclusive monitoring of Windows, Linux, NetWare, and SNMP devices. NetCrunch 5 differentiates itself not only by providing such a wide array of monitoring coverage, but also by doing so in an agentless manner.

NetCrunch 5's new features include predefined monitoring policies for major operating systems and applications such as Exchange, SQL Server, Oracle, Insight Manager, IBM Director, and others. NetCrunch 5 is able to monitor an assortment of systems and devices, as it also contains RPC, WMI, SSH, and SNMP monitors and more than 65 built-in network service monitors. A major feature that makes NetCrunch 5 so easy to use is its intuitive user interface. NetCrunch 5 will automatically perform network discovery, a scan of your system that will identify and classify nodes and present them in a graphical map form, making it easier to see where problems occur and making solutions faster and more efficient.

AdRem Software's NetCrunch 5 promises to reduce the cost of IT operations and thus improve company revenue. IT professionals will appreciate lower maintenance requirements and shorter deployment time.



NetCrunch 5 presents data in graphical form, making problems easy to identify and faster to correct.

NetCrunch 5 is designed to run on Windows XP SP2, Vista SP1 (excluding Home), and Windows Server 2003 x32 or x64 and comes in two editions: Premium and Premium XE. The Premium XE edition is intended for a dedicated server, as it is optimized for larger, intensely monitored networks. Both editions include a one-year professional service agreement with annual upgrade protection.

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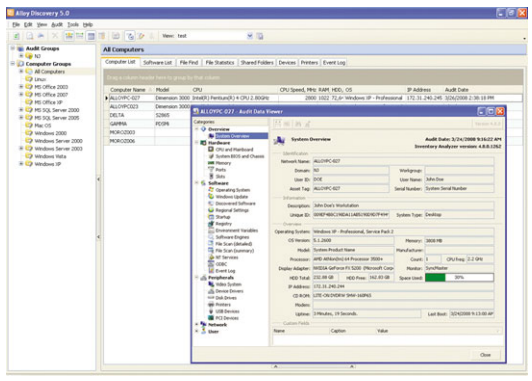
Audit Your Computer Inventory

Alloy Discovery Provides All The Necessary Tools

THE INVENTORY of computer hardware and software can be easily overlooked. Alloy Discovery from Alloy Software is a network inventory solution to help SMEs gain tight control over their entire computer inventory through a combination of audit methods that include an agentless on-demand audit, login-script, scheduled task, and the portable audit for non-networked computers.

Alloy Discovery can configure, deploy, and run inventory audits, as well as help analyze the audit results. For flexible deployment, the software offers multiple configuration options, including single- and multi-domain networks; workgroup networks; remote (WAN) sites and isolated networks; and standalone and non-networked computers. Alloy Discovery lets you audit computers on an ongoing basis.

To help maintain an up-to-date inventory, Alloy Discovery includes an automated archive process called "Pruning." This process allows you to define a schedule for the removal of obsolete audit snapshots and determine the file storage path for archived records. The system will then automatically remove obsolete audit snapshots from the Inventory Repository.



With flexible data filtering and grouping, Alloy Discovery lets you sift through data using specific criteria.

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Alloy Software Alloy Discovery

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Audit the hardware and software on your computer network

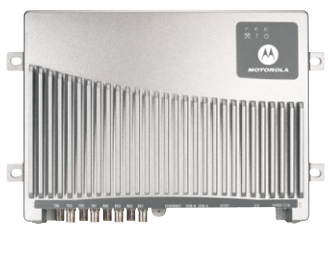
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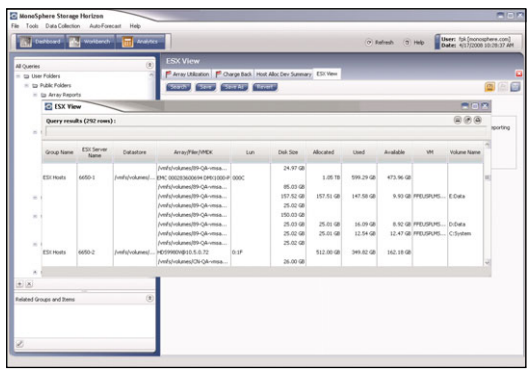
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Other enhancements include automated chargeback analysis, advanced analytical capabilities, and analysis of database storage consumption. With automated chargeback analysis, logical and physical IT assets can be grouped with a variety of different parameters and automatically analyzed to show storage usage.

Advanced analytical capabilities provide reports to help eliminate wasted or unused storage assets. Reports analyze storage consumption by volume group, free pool report, LUN-to-disk analysis, and dark storage breakdown. Other new analytical functions include automated scheduling and distribution of analytical reports.

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MonoSphere Storage Horizon 3.7

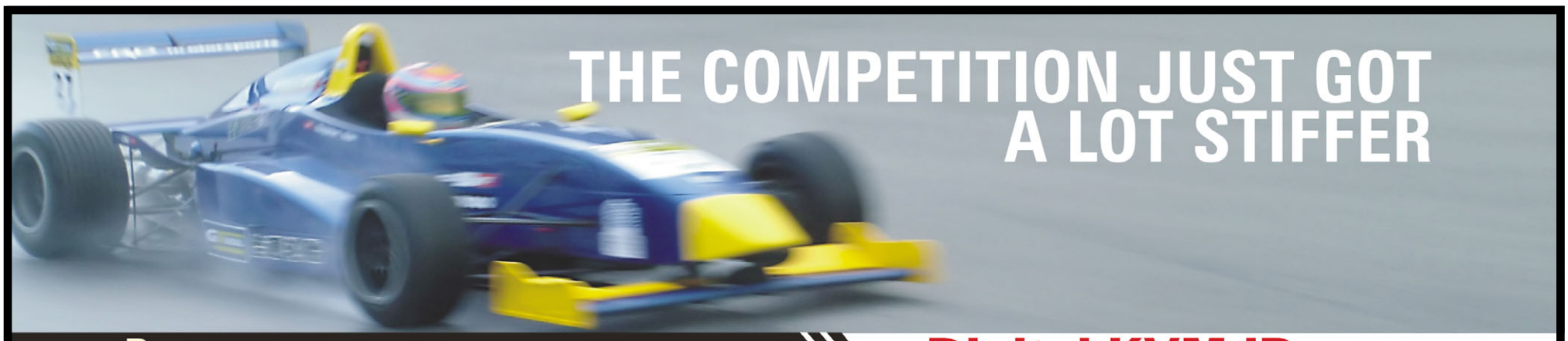
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How To Reduce Your Data

Before Buying More Storage, Think About Reducing Data Instead

by Elizabeth Millard

• • •

In many ways, it's simple math: The less data a company has, the less need it will have for storage. The reality, of course, is a bit more complicated.

Companies create scads of data every day, from presentations loaded with images and video to applications developed in-house that handle customer requests, account processing, and numerous other functions that keep a company running.

Reducing data isn't as easy as filling up a digital trash can and throwing it out every few months, but there are methods for cutting down on the amount that needs to be stored.

Recognizing The Need

Unlike putting in more blade servers or implementing a higher-level security system, storage is fairly cheap, experts note. Thanks to a very competitive market, there are services, appliances, software, and devices that won't take a chunk out of budget money, but it's in the hidden costs that a company might get burned.

The largest concern is power and cooling because implementation of more storage often requires yet another piece of equipment in the data center. If a company is using a storage service, rates go up. And with both approaches, there's need for more management strategies to handle the increasing amount of storage.

For example, companies may find they have to run more fire drills to make sure that data can be accessed after a loss, and those drills can take time and resources away from everyday tasks.

Also, even with the affordability of smaller appliances, some IT departments have had their budgets frozen in anticipation of tough economic times ahead, says Jon Ash, vice president of sales for Storwize (800/670-0281; www.storewiz.com). "I've heard from customers who have the CIO say not to spend any more money, but they'd never tell the employees to stop creating data," he notes. "To be green and reduce power costs, though, you have to reduce data."



Tiered Storage Management

There are several choices when it comes to data reduction, and one that's gotten plenty of buzz lately is tiered storage, in which each piece of information is given a priority level and is stored accordingly.

For example, company tax returns would be stored in a way that recognizes the data is vital and may need to be accessed frequently. However, memos about upcoming meetings will likely not need to be seen too often, so could go on disks or tapes that are put into long-term storage.

This type of approach also dictates more input from other departments, which can take time initially but could give employees and executives a more realistic view of how storage is done. Rather than thinking of storage as a bottomless well from which they can pull up whatever they need, employees could see it more as a closet that can only hold so much before it bursts.

"Information retention strategies are unique to each enterprise and should be determined by the people creating that information, not determined by what kind of equipment you have already," says Paul Clifford, founder of technology consultancy DavenportGroup (www.davenportgroup.com). "This should prompt discussions from IT with other managers about what they really need and how long they have to keep it and to set priorities for intelligent archiving."

Compression

Unlike physical files, data can be compressed with applications created just for the purpose. Many storage companies offer compression capability in their applications so that more data can take up less space.

"By using compression, you can better utilize what you've already got," says Ash. "That's important for saving money that would otherwise go toward powering racks of small disk drives."

The only type of data that doesn't work well for this strategy are image files such as JPEGs and MPEGs that are already compressed, he says. Also, to be used or reviewed, data has to be decompressed, which could take extra time. But in general, most compression applications are simple to use and are usually already present in a storage system, and SMEs just need to tap into their power more often.

Deduplication

Unlike compression, which tackles file size, deduplication targets repetition. This is especially crucial as data gets created and then emailed to several employees.

For instance, a PowerPoint presentation that's already a bear in terms of size could be sent out to 200 employees in preparation for an upcoming meeting. Some employees might unwittingly reply without deleting the presentation, making even more copies of the same file. When the emails get archived, there could be up to 300 copies of the exact same presentation.

If this type of scenario happened once, it might be no big deal for a storage strategy, but consider that it could be occurring a few times a week, clogging up a system with unnecessary files.

Forrester Research analyst Stephanie Balaouras notes that deduplication tools are widely available and should be far more used than they are currently. She states that these tools are often part of storage systems that already have efficiency controls in place, such as reducing backup windows.

Comprehensive Strategies

Another important aspect to data duplication isn't about adding new technology but, rather, getting rid of the old stuff, according to Chris Cummings, senior director of data protection solutions at NetApp (www.netapp.com). At many companies, a surprising amount of retired equipment is still running, drawing power away from necessary machines, and may be hooked into automatic backup systems.

"We see some customers who retain information for a month and others that want everything for 100 years," he says. "There's a reason why they've made those determinations, so length of storage time is important in determining data reduction."

There are several choices when it comes to data reduction, and one that's gotten plenty of buzz lately is tiered storage.

The benefit of using data reduction technologies is that they frequently play well together, and this can be part of any comprehensive strategy.

For example, data can be deduped and compressed before being put in a tiered storage system. "It can be very synergistic," says Ash. "It all works together nicely, so you can do data reduction at every step and save storage costs along the way." P

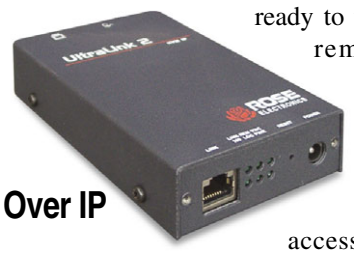
Top Tips

- Create workable, logical policies around data storage that are easy for employees to follow.
- Ask storage vendors about data reduction features; more are being added, so a next-generation appliance or service may have more functionality than in the past.
- Be vigilant about limiting nonbusiness downloads, such as messaging applications, movies, and TV shows, because these can hog bandwidth, as well as storage.

PHYSICAL INFRASTRUCTURE May 23, 2008

Remotely Manage Any Type Of Application

Rose Electronics UltraLink 2 Offers Remote KVM Access Over IP



Rose Electronics UltraLink 2 sets a new standard for an easy and secure way to remotely manage server room environments, remote standalone applications such as digital signage, and other remote applications.

Use the UltraLink2 to access your computers and servers locally, across your network, or over IP using a Web browser. Connect the unit to a Rose Electronics KVM switch, and you now have access to as many as 1,000 computers or servers from anywhere in the world.

The UltraLink 2 is easy to install and configure. Connect the unit, assign an IP address and network information, and remotely connect to the unit, and it's ready to use. Instead of going to a remote site to perform an upgrade or patch, let the remote site come to you.

The Virtual Media feature allows the IT professional to remotely access USB-equipped systems and perform patches and upgrades without the expense of a trip to the remote site. On the dual access model, a local KVM station can be connected for direct access to the connected computer.

Other key features include:

- Virtual Media feature allows authorized remote users to transfer files and folders to a computer. This feature makes upgrades possible from remote locations.
- Front panel indicators show Link, Local or Remote connection, VNC, Network Speed, and Power.
- Password security prevents unauthorized configuration and access.
- Resolution up to 1,280 x 1,024.

Rose Electronics UltraLink 2

Starts at $695

Connect to computers or servers locally, across a network, or over IP

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Tracking Down Power Hogs

Continued from Page 1

"Compile this information in a database—the database may be as simple as a spreadsheet—to identify hardware that is utilizing the most power and cooling," Gill says, adding that a good inventory management system can help the process, although a more complex data center might need a full-blown asset management system to enable efficient identification.

Monitor Duty

After this information is collected, the next step is monitoring, a requirement for nailing devices that are nabbing more than their fair share of power. "Whether it is determining the efficiency of your data center or just trying to find out what devices are the power hogs in your data center, you cannot improve something that you cannot measure," says Calvin Nicholson, marketing manager at Server Technology (800/835-1515; servertech.com). "By measuring and monitoring the power used within a particular device within the data center, it becomes very obvious which devices are your power hogs."

Continuous monitoring is the most effective method for accurately gauging the power draw at all times.

According to Eaton's Loeffler, accurate power-monitoring equipment can come in the form of a power strip in front of a rack of equipment or in larger floor-mounted power distribution systems, such as PDUs (power distribution units) or RPPs (remote power panels). Monitoring must then target each load to determine the actual power draw of the load. Eaton explains that this can be accomplished manually by an electrical contractor or power consultant to check the power used on each circuit.

"However, if this approach is taken, the power consumption should be recorded over a period of time, not just a quick snapshot, to make sure the highs and lows are captured, as many business processes can be cyclic in power consumption," Loeffler says.

Nicholson notes that identifying power-hungry devices using a PDU can be as simple as inspecting the local current meter on the PDU or as complex as measuring the actual power per device and then typing that information into a Web-based user interface or separate software package to log, graph, and trend the power consumption.

Continuous monitoring is the most effective method for accurately gauging the power draw at all times. Loeffler says that this monitoring method allows for the assembly of easily downloaded power trend data that can enable managers to determine which devices are performing correctly and which are draining the budget. Devices such as intelligent ePDUs can allow for continuous monitoring.

Cost Of Cutting Costs

Although data centers will save money by eliminating power hogs, there are costs involved in the process of identifying them. Loeffler estimates that organizations can expect to pay at least $200 per device to monitor it with a basic hardware monitoring system, but the more devices that are monitored, the less expensive that per-device cost can become—potentially as low as $50 per device. However, managers also need to factor in software costs, which can be substantial.

"Software, again, is a function of the size of the application," Loeffler says. "A small data center may get away with $10,000 to $20,000 for the [software] package, whereas a large data center could spend in the hundreds of thousands to gather knowledgeable information."

And what if all of this monitoring uncovers things that data center managers wish they never saw? "Of course, with any new-found information about the equipment you are running, there could be some down side," Loeffler says. "The worst could be that your current power delivery path is antiquated and needs a refresh, and most people discover this when they start looking for individual load power consumption data. This usually involves downtime to refresh older power delivery products with newer ones, but if this whole exercise was performed due to power and cooling pains in the business, it is usually well warranted."

Top Tips

Ben Stewart, senior vice president of facilities engineering for Terremark Worldwide (www.terremark.com), serves up several snippets of wisdom that can help data center managers find and eliminate power hogs in their environments.

Pay attention to the press. "There are countless articles, blogs, Webinars, and white-papers on the subject of green data centers. That material indicates that of the power consumed by a data center, roughly 50% is consumed by the IT load, and the other 50% is consumed by the supporting infrastructure—power and cooling systems primarily. And of the infrastructure load, the best opportunity to become more efficient lies in the cooling systems," Stewart says.

Pick the right tool. "The Green Grid supports the use of PUE [power usage effectiveness] and DCiE [data center infrastructure efficiency] as measurement tools," Stewart says. "The Department of Energy is developing a measurement process called CD Pro. Those are the leading standardized measurements in discussion today that will allow data centers to compare their metrics to determine if they are in line with other facilities, better or worse."

Build a case. "The measurement process will help a great deal. . . . Once the facility's efficiency is measured and understood, corresponding improvements can be estimated, and the recurring savings in operating costs—in the form of reduced utility bills—can be estimated, bolstering the business case to assign the capital expenditures to effect that resolution," he says.

Top Backup Problems & How To Avoid Them

Continued from Page 1

being used either from the server side or application itself.

Solution: Get end-to-end views into your complete storage array. Clark recommends finding software that provides a complete picture of what's in your storage array. This software should come with good predictive analysis for better capacity planning and collaborative reporting, along with views into the storage array, views into the host on the storage utilization, and views into the amount of storage an application uses.

Once you have a clear view of how your storage is being allocated, you can then reclaim unused storage, says Clark. Clark points out that a fine balance exists between having enough storage space to properly run applications and maintain availability for end users and having big blocks of unused space, but with end-to-end views, you're equipped with the knowledge to have a constructive conversation on the situation.

Your servers oftentimes don't tell you when your directories have not been backing up properly.

Problem: Notoriously Short Backup Windows

Companies of all sizes are aggregating so much information nowadays that traditional methods of backup, such as tape and optical media libraries, don't allow you enough time to save it all.

Solution: Nearline "high performance" storage/interim high-speed disk-based storage. Bill Long, technical engineer at NetCom USA (www.netcomusa.com), a provider of RAID storage solutions, suggests caching backup data to an interim high-speed disk-based storage device instead of to tape or optical media directly.

"Fast nearline storage systems can allow all of the backup data to be copied quickly, at disk array speeds, from the source server. Then, once the copy is made, the backup operation continues by substituting the nearline storage device as the source of the backup data, releasing the main server (and its storage) from the backup operation," says Long. "Typically, with the proper software, the backup operation is completed in the background between the nearline storage system and a tape or optical archiving device."

Problem: Your Stuff Isn't Backed Up

Unfortunately, your servers oftentimes don't tell you when one of your directories has not been backing up properly. David Barley, CTO of digital archiving services provider Casdex (www.casdex.com), says that a customer of his moved his Microsoft Exchange environment to a different folder. But its backup server wasn't alerted to this change, so when it looked to the original environment, it just "assumed" there was nothing to back up.

As a result, the customer did not back up the Exchange server for three months. And the backup server didn't create any error. "It didn't really fail," says Barley. "There was just nothing for it to do."

Solution: Get reporting tools to help you catch errors. "It's one of those tasks that's ongoing for backup administrators. You've got to stay in sync and be aware of change management," says Barley. "Today's data centers are like a hotel sometimes. The occupants change, and your backup environment gets out of sync."

Therefore, Barley recommends installing proper backup reporting tools to catch these glitches. These tools can tell you if a mismatch exists between the directories on a server and the backup policies assigned to the server and whether you need to take a look at the situation.

Easiest Problem To Fix: Failing To Take Backup Seriously Until It's Too Late

Bart Grantham, vice president of research and development at managed hosting and storage solutions provider Logicworks (www.logicworks.net), says the biggest problem he encounters is people and businesses not caring enough to back up their data. "It's a psychological problem," Grantham says. "People who have lost data are much more on top of the backups questions."

Solution: Back up your stuff properly or outsource your backups to someone who will. This seems like a no-brainer, yet Logicworks Vice President of Sales Greg Kitaeff says that recently a potential customer building a high-profile application told him it was going to forego Logicworks' backup service. "That's just silly," Kitaeff told the prospect point-blank.

"When you're outsourcing your hosting or your backups, you have someone who is financially accountable," says Kitaeff. "We're getting paid to care about it, and if we don't care about it enough, we'll get hit with some sort of financial penalty."

In contrast, if you do your backups yourself and you don't take the job seriously enough, you will have no recourse if your data gets corrupted or destroyed. And for most organizations today, losing your data is tantamount to losing your business.

Most Common Problem: Slow Backups

People everywhere complain about slow backups. Some of the time has to do with backups just getting bigger. Nevertheless, it doesn't explain why a given backup takes three hours longer than you anticipated.

Solution: Check your network settings. According to David Barley, CTO of Casdex (www.casdex.com), backup systems thrive on the networks feeding the data. And if something gets out of sorts with that network, it can slow things down. Oftentimes, it's as simple as upgrading a network or changing the network settings.

For example, slow backups often can be fixed by adjusting your duplex settings to full duplex. Many networks are built out with the duplex settings set to auto. Although auto duplex may work well for a time, something as simple as upgrading the firmware on a network switch could keep the switch and the backup client from properly communicating, and those auto settings could resort to half-duplex instead, says Barley.

Moving The Data Center

Getting From Point A To Point B Takes Careful Planning

by Curt Harler

• • •

Data center managers typically are more concerned with moving data than with moving computers. However, when the word comes down from on high that it is time to move a data center—for whatever reason—the question is not why, but rather how, to do it.

Whether for a relocation or consolidation of data centers, both software and hardware must be moved. The former may be trickier.

"Anything that can go wrong will," says Andi Mann, research director at Enterprise Management Associates. "A move is a big, dangerous thing." Mann speaks from experience. Before becoming a consultant, he was responsible for a data center move from Australia to the United States.

"If you have a lot of ad-hoc processes in your data center, you'll face hell. It comes down to planning, planning, and more planning," he notes. "I'd spend twice as much time planning and half the time doing."

"Plan, plan, plan," agrees Kevin Schultz, senior director for UniGroup MultiTek, the Denver-based parent company of Mayflower Transit and United Van Lines. "Start at least 180 days out and get the appropriate applications, Internet, and network people involved." He notes that availability windows will be different for different stakeholders. While movers will provide expertise as part of their packages, if the project is sizable, consider hiring a consultant, he advises.

"Once you make the decision to move, start planning immediately. You can't overkill planning," Schultz says. A logical way to look at the move is to divide it into the software side and the hardware side.



Top Tips

- Plan, plan, and plan some more.
- Keep both hardware and software help available throughout the move.
- If the new data center will be set up like the old, take digital photos for a before/after look. Shoot cable connections, printer locations, everything.
- Make multiple trial runs before cut-over.
- Have staff available in both old and new locations during the process.
- Virtualization makes moves easier.
- Redocument everything after a move.

Software Side

The first step is to set up repeatable processes at the old data center. Automate everything you can: provisioning, changes, patches, workload management. "Automate, or at least document, everything," Mann says. "From a software perspective, establish complete documentation up front. That will make the back-end easier."

One of the challenges is that much of the documentation exists only in the minds of the smart people working there. "Call it tribal knowledge. It works on a day-to-day basis. But when it comes to a data center move, it becomes a crisis-triggering event. Those key people are not always available," Mann warns.

Trying to establish a new data center in an ad-hoc manner is a recipe for disaster.

"A lot of being successful is doing trials," Mann continues. After backing up everything, make several trial cutover runs. Grab some downtime and do a 12-hour run. Identify which critical systems go awry. Mann says that virtualization will make it easier for an SME to move an entire operating system quickly and then bring it back quickly.

"You need both contingency and rollback plans," Mann says. Obviously, doing an entire rollback for one application is not practical. But that extra step should be available.

Physical Relocation

Moving servers is like moving Grandmother's heirloom vase. Whether it goes across the street or across the country, everything must be marked and packed correctly. However, the people who move electronics should be specially trained—not the ones who move furniture.

"We have special technicians who are network trained and Windows certified," Schultz says. Other van companies do, too.

Even before the boxes come in, allocate a significant amount of time to power down equipment before packing and to power up afterwards. "Equipment needs to acclimatize itself at both ends," Schultz notes. "Servers are not used to being turned off and on. You will blow power supplies."

"Connections break," Mann adds. It's another of those inevitable gremlins. Be prepared with replacement cables and clips. Have people who know how to work under the floor risers and in the switch closets.

"Overpack," Schultz advises. This is not a cardboard sales pitch—he notes electronic equipment is prone to weather damage as well as bumping. "Use antistatic packaging for all moves," Schultz continues. He also notes, for example, that UniGroup MultiTek doesn't do any hand-carrying of equipment except to pull it out or put it into racks. Everything should be moved on dollies or flats. Most data centers run lean on personnel, so the mover will supply large amounts of labor to throw at the job.

"You're looking at a 12- to 24-hour period for a classic server move," Schultz says. Add another 24 hours for testing, verifying IP addresses, and the like.

For long moves, consider a climate-controlled truck environment, Schultz says. Computers and tapes are used to living at 70 to 74 degrees Fahrenheit and 50% humidity. Quick, cross-town moves usually do not require special trucks, but for long-haul moves of critical equipment, he recommends considering air freight to minimize time in transit. In special cases, customers may require machines be kept running. Generator vans are available to assure that.

The Final Steps

"Find downtime for the move—the least critical time in your business environment," Mann says. Because IT should be a service provider to the whole business, IT should be ready to go when the business day resumes.

"Be sure you know when you will be down and when you will be up," Schultz agrees. That can be tough for Web-based businesses where a customer may log in at 3 a.m. Saturday.

Still, Schultz says most of the moves he is involved in are done over the weekend. "Avoid Monday through Friday, 8 to 5," he says. Holiday weekends buy an extra day. Typically, moves run from midnight Friday to 7 p.m. Sunday, giving 12 hours for testing before going live at 7 a.m. Monday.

Bring up key systems such as Web access or sales first. Payroll might be a second phase with archival servers later. MultiTek color codes everything that gets moved, both for location and criticality. Red servers will be the last down and the first up. Blue servers might be packed early and will be the last set up.

"Redocument everything after the move," Mann says. Having staff at both ends of the move will help with the inevitable troubleshooting. "You'll need real-time access to programmers, systems analysts, hardware gurus to fix problems," he adds.

Look hard at everything in the new environment. "Monitor everything in a meticulous way," Mann says. "Know your baselines. A one-second response may be normal—or the start of a disaster. You're in a whole new environment. Be sure you are familiar with it." P

Reasons To Move

Data center managers often find themselves faced with "moving day" for reasons that have little to do with technology. Among the main reasons data centers have to be relocated are:

- Consolidation of data centers
- Merger or acquisition
- Availability of cheaper lease space
- Growth beyond existing site
- Power or communications issues into site

Storage May 16, 2008

Versatile Dual-Mode Shipping Case

Safely Transfer Enterprise Hardware With The Pelican 1730



The transport and protection of sensitive equipment should be important to any company that cares about the integrity of its products. Items such as flat-screen displays, hard drive towers, and server nodes need to be moved with careful consideration so as not to disrupt vital components during shipping. IT professionals who oversee valuable hardware understand how essential it is to have a dependable mode of transportation.

Pelican's 1730 Transport Case functions as a reliable case that protects even the most fragile supplies as they're sent from location to location. With 10,000 cubic inches of configurable storage, the 1730 is designed to be moved either individually or stacked on pallets. Mobile-friendly features include polyurethane wheels, nylon hubs, and two double-wide handles convenient for manual towing. Stacking multiple cases is never an issue with four extra-deep, base-to-lid locking cleats, and the case's dual-action latches are built to withstand close to 400 pounds.

The automatic pressure equalization valve prevents moisture from entering the case. This feature also enables the case to adapt to any altitude. The optional manual pressure regulation is ideal for housing equipment that requires a temperature-controlled environment. If the humidity level changes inside the case, the humidity gauge will change color as it rises above 40%.

Other characteristics that make the 1730 design unique include the sturdy, yet light, solid wall architecture with open cell core, polymer construction, watertight O-ring seal, and fold-down handles. Inside is the customizable Pick 'N Pluck foam, which comes as a five-piece set.

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Save Money On Data Center Cooling

Tips To Conserve Energy & Cut Costs

by John Brandon

• • •

THE CONCEPT OF "going green" in the data center is important, especially in light of new statistics from the U.S. Environmental Protection Agency about data center energy use and the long-term impact of global warming. Yet, there's another kind of "green" that can have a direct impact on a smaller company's bottom line. This kind of green—the money spent on cooling expenses—is often difficult to manage because there are so many options: changing infrastructure or replacing inefficient cooling systems, upgrading or retrofitting existing gear, or complementing systems to make the data center more efficient. The following guidelines can help cut through the clutter and offer some insight into a sound money-saving plan.

Add Complementary Systems

According to Doug Garday, an engineer with Intel data center engineering services (www.intel.com), a good first step in saving money on cooling is to look at the existing systems. You can often enhance efficiency by adding new cooling technologies. This approach can be more gradual, which is a key benefit for SME managers who may not have the capital investment to replace air-conditioning systems.

"Complementing or replacing chillers with a wet side economizer is a way to improve HVAC effectiveness from fall through early summer," says Garday. "Wet side economizers use condensed water produced by cooling towers to provide 'free' data center cooling, consuming less power than chillers. A decoupled wet side economizer is separate from the chilled water system, so each can be used independently or with one another. This means you can use the economizer and chillers simultaneously, with the flexibility to distribute the load between them as necessary. A decoupled economizer complementing chillers with blade servers will result in an even greater improvement, allowing for use of the economizer for cooling during more of the year."

Garday explains another technique in which data center managers can recycle excess heat and redistribute it through the rest of the facility by using heat-recovery chillers connected to a low temperature loop that sends heat to key areas within the entire building. "The chillers become part of the overall facility's cooling system and are able to recover heat from offices, communication rooms, and meeting rooms," says Garday. "This eliminates the need of additional boilers by using the same system to supply cold and hot water to the building." Intel is currently using this technique at one of its consolidated data centers in Israel.

Top Tips

- Use data center analysis tools to check airflow, heat buildup, and cooling for servers, racks, and storage equipment and then make changes based on that data.
- Check with your power company about monitoring the meter on the building side of the data center and from the utility company and compare results.
- Consider alternative energy sources. At Google HQ, for example, they power 30% of peak power with solar panels on the roof.
- Consider the data center location and relocate if the savings from a new location (where energy bills are much lower) will pay for the move in a specific time frame.



Plan For Cooling Expenses

Joe Armshaw, an area manager for Atlas Sales & Rentals (310/320-9800; www.atlassales.com), says another important technique is to examine cooling bills closely and look for potential savings. In some cases, companies pay exorbitant fees for cooling at night or on weekends when the systems are not in use (a common scenario for a small or medium-sized enterprise). Installing portable cooling units can help because they can be set to shut down at certain periods of the day when the data center is not running at full operation.

"With the cost of portable air conditioners being affordable, a data center could recover the purchase price in just a few months," says Armshaw. "Another value-added feature of portable air conditioners is that they are like furniture and can be rolled out of the rented office space when a company outgrows its current location. With the cost of installing a permanent split system and then having to leave it when changing locations, portable air conditioners again prove to be the smart choice."

Armshaw says an ancillary benefit as a company starts to grow is that, even if it does sign a long-term lease on a new building that provides all of the cooling for a data center, the same portable units can be used for spot cooling as needed. He also touches on the merits of watercooling.

"Water-cooled products prove to be valuable when a water loop is present from either a chiller or cooling tower," says Armshaw. "These units require a little less power than an air-cooled unit because there is no condenser fan. The major drawback to water-cooled units is that when the water loop is shut down, the unit would have to be turned off unless the building keeps the circulating pump going throughout the night and weekends."

Adopt A Holistic View

Apart from the new technology advancements such as water-side cooling and using chillers to redistribute heating and cooling, many experts are calling for more comprehensive metrics and reporting on data center power usage and cooling, especially before making a major investment. The advantage is that managers can act on the new knowledge to control costs.

"The issues need to be looked at holistically and not in isolation—the whole data center ecosystem needs to be considered and understood," says Steve Wallage, analyst and managing director at BroadGroup. "There are a lot of fairly simple things that can be done, from a proper audit to understanding exactly what goes in the data center when the temperature keeps going up. Often, the challenge is as much business/cultural as technological—getting IT to understand and appreciate the power costs and involving data center managers in IT decisions. SMBs need to be aware of future standards and environmental legislation. At the current time, it is difficult to know which metrics will be important."

Cooling Cost Quick Fixes

Interestingly, while a holistic view makes sense, there are also "quick fixes" to high cooling costs that companies can do right away while they develop other plans. One, according to Ken Baker, a data center infrastructure technologist at HP (www.hp.com), is to simply let servers and other equipment get hotter. "Technology manufacturers design their equipment to run at temperatures higher than most data centers are set at," says Baker. "The American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) recommends an inlet temperature range of 68 to 72 degrees Fahrenheit."

Baker also recommends replacing the worst energy offenders in a data center as a way to deal with high cooling bills, typically starting with older servers that require more cooling. "The hardware made by the technology industry today is vastly different than that made as recently as three years ago. More low-power processor choices, availability of low-power memory, and more efficient power supplies make replacing that old hardware a good energy move. Then, the true path to energy management, and therefore reduction, lies in knowledge of your situation first."

Implementing these plans can help control costs and reduce cooling expenses, resulting in long-term benefits of less energy waste and a cleaner environment.

Manage Unstructured Data

Keep Data Under Wraps With Pentura's Data Risk Assessment Service

AS THE AMOUNT OF DATA generated by organizations continues to grow, the lack of visibility surrounding the content and user access increases the risk to the business. At the heart of the problem is business-critical data that without classification and correct permissions poses a large risk to company security. Pentura's Data Risk Assessment Service allows companies to identify potential risks around data security without the need to invest in expensive dedicated hardware and software tools.

The Data Risk Assessment Service begins by providing visibility of the unstructured data on the network. Once it is determined where the data resides, Pentura will consult with you to classify the data based on three key factors: confidentiality, likely data owners, and current permission levels. Following the identification of the key data assets, Pentura is able to model and report on the usage of such data over an agreed period of time.

On completion of the audit, Pentura will then advise on the correct least privilege access model and policy for the data in question, reducing potentially excessive permissions and providing a measurable reduction of risk for the business.

The Data Risk Assessment Service provides IT administrators with best-practice advice to assist with Active Directory users and groups, so IT staff can also address data leakage prevention on a continual basis.

Organizations can also use information in the Data Risk Assessment report to satisfy internal and external audits without the use of heavy resources or large investments.

Pentura Data Risk Assessment Services

Service that enables organizations to classify and assign permissions to unstructured data

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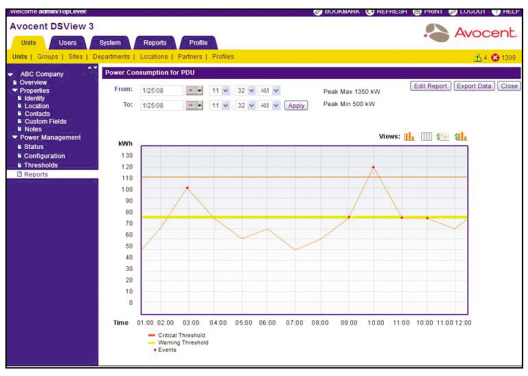
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PHYSICAL INFRASTRUCTURE

MAY 16, 2008

More Power Management

Avocent's DSView 3 Power Manager Helps Admins Measure Data Center Energy Use



DSView 3 Power Manager helps managers monitor and track power consumption in the data center.

A LARGE PORTION of the cost of running a data center centers on power consumption. If companies have greater control over power monitoring and management, they can save substantially on costs.

The DSView® 3 Power Manager, a plug-in for Avocent's DSView 3 management software, addresses this need. DSView 3 software provides centralized management of all attached network devices by consolidating all views into a single interface. The plug-in enables users to collect information about the power being used by a unit, rack, or row of racks to more effectively manage power efficiency, reduce problems with outages, and reduce costs. DSView 3 Power Manager provides a calculator to help managers see power-to-dollar costs by converting the amount of energy used from kilowatts to kilowatt hours.

Features of the plug-in include Consumption Reports, Trend Reports, Thresholds, and Alarms. Consumption and Trend Reports track energy use over user-defined time periods and monitor energy consumption over time. Users can set critical level warnings, as well as customizable actions to solve problems with Thresholds, and managers can customize Alarms to alert them when threshold levels are approached.

By integrating with sensor hubs from Uptime Devices, DSView 3 Power Manager provides environmental monitoring and reporting that includes temperature, humidity, and water levels. When paired with Avocent's PDUs, managers can also monitor and control individual outlets and outlet groups.

DSView 3 Power Manager

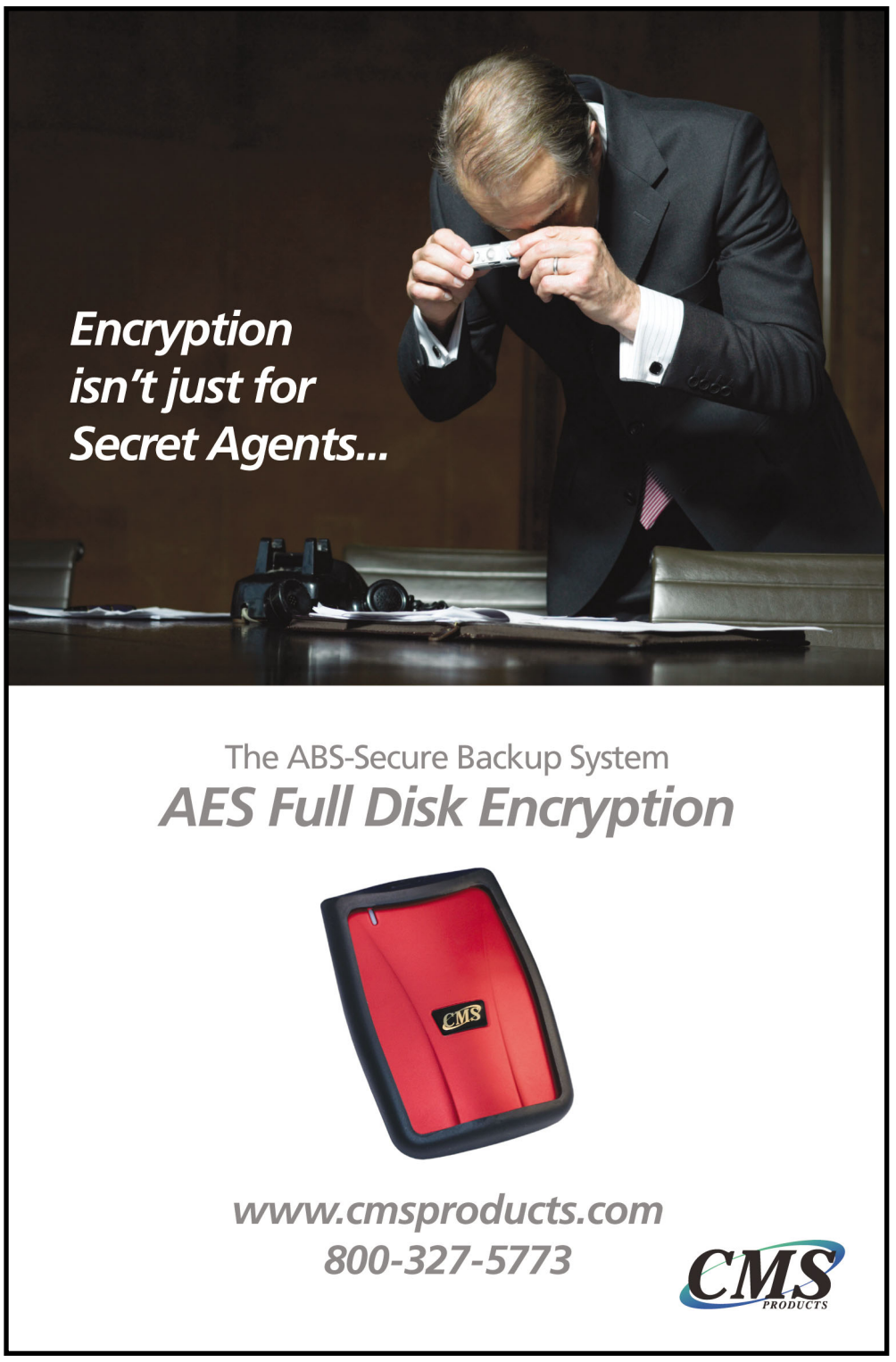
Power Manager plug-in: $4,995; DSView 3: $2,495

Provides detailed monitoring and reporting about power consumption for data center managers

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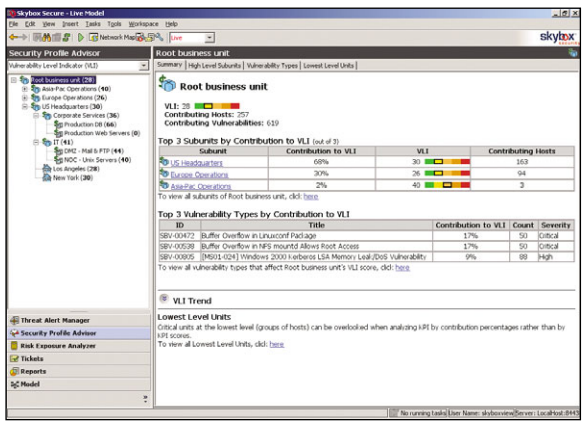


SECURITY

MAY 16, 2008

Visible Network Protection

Skybox View 4.0's Automation & Analytics Provide Transparency & Security



Skybox View 4.0 organizes important security information and makes it easy to sort through.

MOST ORGANIZATIONS have a security point solution, but many of these programs produce a large amount of data, which can be difficult to sort through. And with the diversity of today's threats, managing the life cycle of risk and protecting the network is harder than ever. The Skybox View 4.0 helps alleviate security risks while also providing a unique mix of automation and analytics.

Skybox View 4.0 is a modular and scalable fourth-generation software platform designed to help organizations find and prioritize high-risk areas and foresee compliance vulnerabilities. The mix of automation and analytics provides insight into possible IT security gaps and threats, so organizations can protect themselves. Skybox View 4.0 also offers simulation, workflow management, and decision-support analysis. Through these capabilities, Skybox View 4.0 can craft large amounts of information into precise, timely, and organized plans.

Customers who have implemented Skybox View 4.0 have seen their IT risk exposure window reduced by 95%, the cost of security compliance decrease by 85%, and time and labor decrease between 80 and 90% as a result of the optimization of manual processes.

Skybox View 4.0 provides a generous package of reporting capabilities, including tailored reports for specific audiences.

Skybox Security Skybox View 4.0

Starts at $50,000, based on network size

Offers a mix of automation and analytics to help security risks become more transparent to organizations

(408) 441-8060

www.skyboxsecurity.com

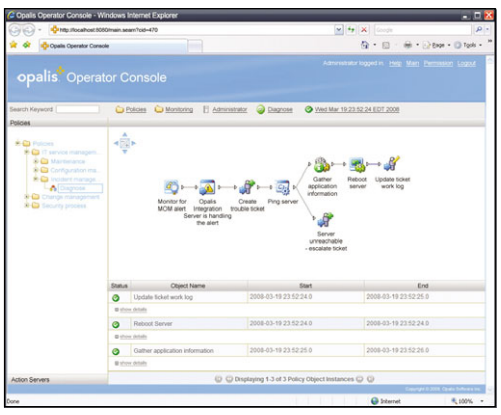
skybox security

NETWORKING & VPN

MAY 16, 2008

Manage IT Processes

Opalis Integration Server 5.5 Reduces Costs & Downtime



From Opalis' Operator Console, users can view automation across the entire network.

IT'S WELL KNOWN that a large portion of IT budgets is spent on maintaining systems already in place. Because of the variety of hardware and software required to run an IT center and the lack of integration between the parts, many tasks must be performed manually. This results in a high number of human errors, which is the primary reason for network downtime.

More automated IT processes and tasks, coupled with better interoperability between different vendor's products, greatly reduce network maintenance costs, as well as network downtime. Opalis Software addresses these issues with Integration Server 5.5. The software is designed to help managers oversee the IT infrastructure more effectively, free up important resources, and generally reduce operational costs.

Features of Integration Server 5.5 include means to efficiently and effectively monitor, operate, and manage data center processes. The New Executive Dashboard gives executives business perspectives and operational metrics to aid in monitoring IT effectiveness. Information included on the customizable dashboard includes status of critical processes, service-level agreement attainment, and return on investment.

The Operator's Console provides comprehensive automation and includes options for both attended and unattended automation. Users have a single view of automation across the entire enterprise that provides direct interaction with running automation so network health indications can be identified and dealt with quickly.

Other options include being able to manage multiple data centers from a single point of control, expanded capabilities for managing the most complex data environments, and options for managing multiple customers from a single deployment.

Opalis Integration Server version 5.5

Integrates the variety of hardware and software in a data center and automates many of their functions

(905) 624-1260

www.opalis.com

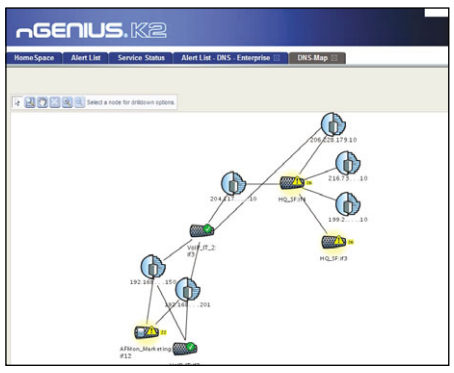
opalis

NETWORKING & VPN

MAY 9, 2008

Application Services View

NetScout's nGenius K2 Provides Visibility To See Status At A Glance



You can determine network status at a glance.

ASSESSING THE HEALTH of applications and services on a network is of utmost importance. However, relying on incomplete information leaves critical gaps in the information flow. NetScout's nGenius K2 uses packet data to acquire network and application monitoring information. The packets contain a rich source of performance data.

nGenius K2 provides network monitoring professionals with a clear picture of network and application health with Service Views, complete with icons for each application service that bear the number and color-coded warnings of various performance levels. Further information can be gleaned from flow and packet details under each application service. The entire interface is designed to help reduce Mean Time to Repair/Restore. The Virtual Service Network Map uses red, yellow, and green indicators to show where a degradation has occurred. Service Summaries under Service Views offer status snapshots with charts and tables to allow managers to view details on service states over time.

Other key features include Early Warning System and nPN (nGenius Performance Network). Early Warning System leverages NetScout's analytics engine and key performance indicators. nGenius K2 learns normal behavior patterns for key performance metrics and alerts network monitors when significant changes occur. Early warnings can go directly to most network management consoles.

The nPN service displays service views and early warnings of the monitoring application itself and all related devices, including nGenius Performance Manager servers, nGenius Probes, and nGenius InfiniStreams.

NetScout nGenius K2

Starts at $75,000

Provides at-a-glance status and early warning of performance degradations

(888) 999-5946

www.netscout.com

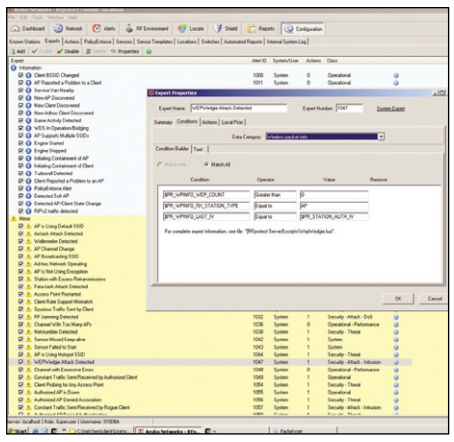
NETSCOUT.

SECURITY

MAY 9, 2008

Security On Demand

User-Generated Threat Definitions Added To Aruba Networks' RFprotect



RFprotect provides detailed information about each detected threat.

ARUBA NETWORKS' LATEST version of its RFprotect software, a product line acquired from Network Chemistry last year, brings user-created threat definitions to your WIPS (Wireless Intrusion Prevention System).

RFprotect WIPS software lets users create an attack-detection signature as soon as a vulnerability shows up. In so doing, it prevents breaches from unknown, undisclosed, and unpatched attacks. The software automatically alerts users to network susceptibilities and blocks unauthorized clients, rogue APs, and unknown ad-hocs. RFprotect also enforces organization-specific security policies and delivers compliance reports.

The RFprotect product line includes two packages, RFprotect Mobile and RFprotect Distributed. RFprotect Mobile is a wireless analysis tool that lets users locate suspect devices and conduct security audits, site surveys, and troubleshooting. It features a Site Survey Analyzer, to let users perform onsite RF surveys, and a WLAN Vulnerability Scanner, capable of identifying Wi-Fi device weaknesses.

RFprotect Distributed is a wireless intrusion detection and prevention system with complete threat detection, attack prevention, "no wireless" enforcement, and compliance reporting. It includes the TotalWatch feature, letting users continuously monitor the 2.4 and 5GHz bands, and the PolicyEnforce feature, letting customers prioritize wireless threat policies.

Users needing information about attacks can go to the Wireless Vulnerabilities and Exploits database at www.wve.org.

Aruba Networks RFprotect

Starts around $5,000

Dynamic signature updating software for WIPS helps protect against zero-day attacks

(866) 552-7822

www.arubanetworks.com

ARUBA networks

SECURITY

MAY 9, 2008

Protecting The Perimeter

MX Logic's MX Perimeter Defense Weeds Out Email Attacks

SPAM, IN ITS various forms, is a network's worst enemy. Not only does it clog bandwidth and bloat email traffic loads, but spam emails can also contain viruses, worms, and other malware. The best way to deal with spam is to keep as much of it as possible outside the network to begin with, thus limiting the resources needed to dispose of it and the risks involved with letting it land in employee inboxes.

MX Logic's MX Perimeter Defense, part of the comprehensive MX Logic Email Defense Service, addresses this issue. Using a database maintained by the MX Logic Threat Operation Center, MX Perimeter Defense compares all incoming mail with a list of known spammer IP addresses to block more than 60% of unwanted email traffic.

Further filtering of worms and viruses is facilitated by Perimeter Defense's WormTraq virus engine. If any message is found to contain malware or has an IP address that is flagged by the Threat Center, the connection will be dropped so the message never penetrates the network.

Anonymous connections are also a threat to a network, as they can facilitate DHAs (Directory Harvest Attacks), DoS attacks, and malicious email attachments. To solve this problem, a user's Internet-facing mail servers point to MX Logic, which conceals them from such attacks. By waging the war against spam at the perimeter, valuable bandwidth is spared for the network to operate more efficiently and with less strain.

MX Perimeter Defense service requires no long-term service agreements, instead operating on a month-to-month basis for users. Live 24/7 phone and email support comes as part of the service. For additional fees, users can add a number of features to the basic service, including outbound filtering, double or triple antivirus, MX Logic Message Continuity, and MX Logic Fail Safe Service.

MX Logic MX Perimeter Defense

As low as 16 cents per user, per month; add-on services available for an additional fee

Protects email traffic from spam and malware, bolstered by live customer support

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www.mxlogic.com

mxlogic

CLIENTS

MAY 9, 2008

Simplified Mobile Solutions



Wyse Viance Integrates With XenDesktop To Improve Desktop Virtualization

AS GLOBALIZATION becomes more important and more professionals are on the move, desktop virtualization has increased. But delivering end-to-end desktop virtualization has its challenges. To help meet the needs of this new mobile workforce, Wyse has introduced the Wyse Viance family, designed to work with the Citrix XenDesktop product line.

The Wyse Viance family is a sleek, fanless, diskless set of desktop appliances that uses just 13 to 19 watts of power. High-quality video is achieved through locally decoded multimedia, using local processing power. Drivers and USB ports are then virtualized back at the server, allowing IT personnel to have granular control over which USB peripherals are used, while no new drivers are needed on these devices.

Citrix XenDesktop uses a delivery protocol, ICA (Independent Computing Architecture), which gives thin-client devices, such as the Wyse Viance, PC-like responsiveness to any site or client. Additionally, IT personnel can assign users to dedicated and pooled virtual desktops through XenDesktop, controlling the active and inactive virtual desktop connections. This improves the reliability of the connection for the users.

The Viance Pro Mobile, suited for the mobile professional, is one of the clients featured in the Viance family of appliances. The Viance Pro Mobile offers 802.11/b/g/n wireless support, along with a 15.4-inch WXGA TFT LCD screen, full multimedia performance (supports WPF-enabled apps), and Gigabit network connectivity for access to quick LAN connections.

Wyse Viance

Starting at $399

Family of desktop virtualization appliances that has integrated the Citrix XenDesktop to help meet the demands of the mobile professional

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Quick & Easy Testing

Carry The PatchTest For Simplified Ethernet Patch Cable Testing

IT'S NOT UNCOMMON to see several tangled up cords weaved around an employee's desk. These wires can be various shapes and sizes, or they can all look exactly alike. Sorting through webs of cables in order to discover bad or unidentified cables can be a tedious, frustrating job. To help make the job of testing Ethernet patch cables quicker and easier, Smartronix has introduced the Patch Test. This is a battery-powered tool that tests the continuity and common wiring standards such as Gigabit Ethernet, Fast Ethernet, and fast Ethernet Crossover.

The PatchTest is also fully compatible with the Smartronix line of SuperLoopers, which are a blend of an Ethernet jack and plug. SuperLoopers are used for loopback testing and to change standard Ethernet cable to a crossover cable. SuperLoopers and the PatchTest tools are to be used when remote testing longer cables whose ends are not colocated.



The Smartronix PatchTest will signify a Giabit Ethernet Straight Through, 10/100Mb Fast Ethernet Crossover, and a bad or unidentified cable via LED lights. Made from RJ-45 cable connectors and molded ABS plastic housing, the PatchTest comes with a keychain attachment to make it a convenient tool for network technicians and IT personnel to carry around at all times. Its dimensions are 2.5 x 1.5 x 0.75 inches, and it weighs just 1.16 ounces.

Smartronix PatchTest

$44.95

Simplifies the testing of Ethernet patch cables for continuity and common wiring standards such as Gigabit Ethernet, Fast Ethernet, and fast Ethernet Crossover

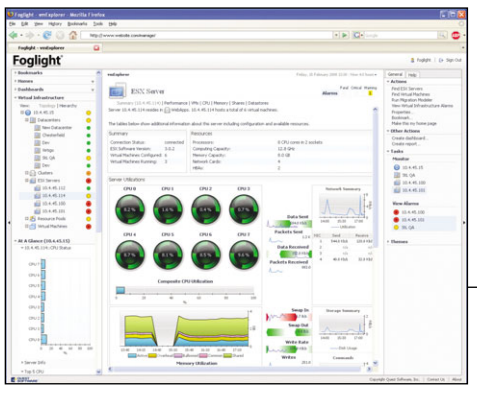
(866) 442-7767

www.smartronixstore.com

Smartronix

Virtualization Management

Quest Software's Foglight Monitors Impact On Applications, Users



Foglight manages all views of the virtual environment and correlates the virtualization activity with the rest of the application environment.

VIRTUALIZATION management has become a main focus of many businesses and small enterprises. Application virtualization and application streaming need to be monitored and seen from the end user's point of view.

Quest Software Foglight version 5.2 can help monitor the impact of virtualization on databases, applications, and end users while correlating the usage of resources across physical and virtual platforms.

With performance efficiency being a key factor in overall productivity, Foglight ensures administrators can move to and manage a virtual infrastructure with ease.

The management of mission-critical applications within a virtualized environment is extremely important. Most of the time, problems are not recognized or dealt with properly. Foglight helps companies avoid server downtime and the possibility of service disruptions.The newest version of Foglight adds support for VMware.

Foglight monitors the entire virtual infrastructure from the physical servers to the virtual machines and gives organizations multiple resources and options to help with their overall application management. Using Foglight, companies can contain alarm storms, track virtual machines, view the impact of many virtual machines, receive root-cause diagnostics, monitor VMotion events, and customize views for IT operations, data center teams, and management.

Quest Software Foglight version 5.2

Starts at $1,000 per CPU socket

Application management solution with VMware support

(949) 754-8000

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QUEST SOFTWARE®

PRODUCT OF THE WEEK

Remote Management Plus Security

Rose Electronics' UltraLink 2 Simplifies Managing Server Rooms & Other Apps From Afar

by Drew Robb

• • •

KVM TECHNOLOGY ENABLES an administrator on one keyboard, video monitor, or mouse to control multiple computers. The whole idea is to consolidate server management. More recently, KVM switches have been outfitted to operate over a LAN or WAN. Thus remote operators can control servers and applications from anywhere by either logging on to the network or opening a Web browser.

"Global access to multiple servers is proving to be a key success factor for many companies," says Lloyd Cohen, an analyst at IDC. "The benefits in terms of decreased server downtime and distributed IT control are clear."

Cohen believes that remote KVM technology can improve system reliability, manageability, and security, resulting in lower TCO. As a result, he feels that KVM management technology should be considered an integral part of the IT infrastructure.

Enter UltraLink 2

One such tool is UltraLink 2 by Rose Electronics (281/933-7673; www.rose.com). It provides remote KVM access over IP using high-quality video (with resolutions of up to 1,280 x 1,024). This product was designed with the intention of making it easy to install and operate. The engineers behind it wanted connectivity using any Web browser, with robust security features built in to keep out intruders. It is also compatible with most KVM switches.

"Instead of going to a remote site to perform an upgrade or patch, let the remote site come to you," says David Rahvar, a general partner at Rose Electronics. "The UltraLink 2 allows the IT professional to remotely access remote computers or servers and perform patches and upgrades without the expense of a trip to the remote site."

The unit is available in single or dual versions. The dual model offers a local KVM port to configure the UltraLink 2 and direct local access to the computer or KVM switch. Thus you can connect to a local computer, server, or KVM switch directly or operate remotely over IP using any Internet browser.

"You can access your computers and servers locally, across your network, or over IP using a Web browser," says Rahvar.

The good news is that it doesn't take more than a few moments to get it up and running. First, connect the unit to your network, a local KVM station, and a computer or KVM switch. Then assign an IP address and network information to the unit, and installation is done. Use a remote computer to connect to the UltraLink 2's assigned IP address using any Web browser. By installing a small applet, the connected computer's video will display on the remote monitor, and you have control of the computer.

Easy Monitoring

The UltraLink 2 comes with a wealth of visual aids to make it relatively simple to monitor servers. The Virtual Media screen, for example, helps administrators to remotely access USB-equipped systems when performing patches and upgrades. Virtual Media, for example, allows authorized remote users to transfer files and folders to a computer, thus facilitating remote upgrades.



The video setting menu gives you access to a variety of video settings, such as phase, threshold, horizontal/vertical position, color, brightness, and contrast. In addition, front panel indicators show the network link activity, local or remote data received from the computer, Ethernet network speed (10/100 Mbps), and power, as well as whether a remote viewer is connected.

PS/2 to USB adapters are provided for using USB keyboards and mice. And up to four simultaneous remote users can access the UltraLink 2 at any one time.

On the security side, user ID and password are required for remote login in order to prevent unauthorized configuration and access. Encryption is used to further safeguard the network.

"The UltraLink 2 is designed with the highest regard for security," says Rahvar. "All transmissions to and from a remote user are encrypted with the latest AES 128-bit encryption technology. Up to 16 user accounts can be set up, each with separate access permission levels."

SME Growth

Rahvar says that by now most SMEs will be experiencing some remote access pain. Whether it's a growing legion of home workers, remote sales/support staff, branch offices, or data centers opening for disaster recovery purposes, it is hard to avoid remote users these days. Attempting to manually manage such distributed systems adds significantly to costs. And that's where products such as UltraLink 2 come into play.

"With the increasing popularity of remote computing and interoffice network connectivity, the demand for remote access is something that SMEs cannot ignore," Rahvar notes. "Network access is commonly a more favorable remote access solution because it is cost-effective and convenient for employees to use."

Rose has noticed strong growth in the SME sector for its local and remote server management products, such as digital KVM IP, KVM switches, KVM extenders, KVM rack drawers, and video splitters. While it sells tools to companies of all sizes, UltraLink 2 seems ideally suited to SMEs due to its ease-of-use features and its ability to reduce the management burden in organizations with few IT personnel.

Rahvar says, "UltraLink 2 sets a new standard for an easy and secure way to remotely manage server room environments, remote standalone applications such as digital signage, and other remote applications." P

ROSE ELECTRONICS

PRODUCT OF THE WEEK

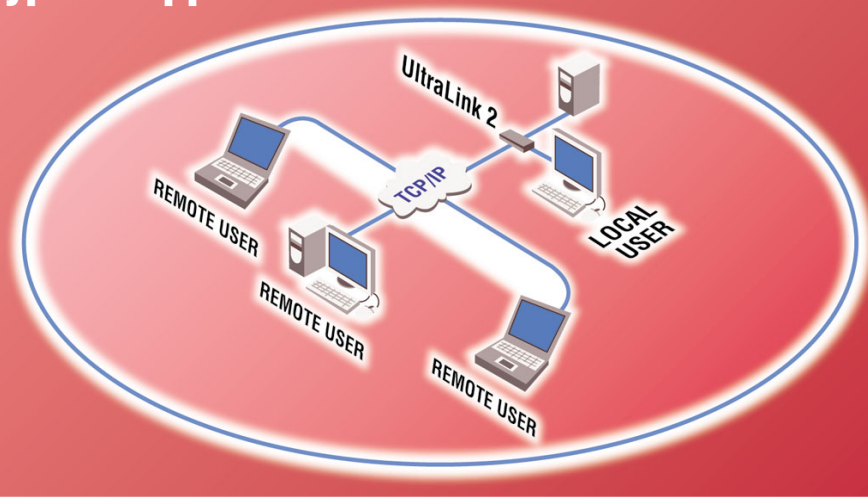
ROSE ELECTRONICS ULTRALINK 2

Description: UltraLink 2 helps you access your computers and servers locally, across your network, or over IP using a Web browser.

Interesting fact: You can connect UltraLink 2 to a Rose Electronics KVM or other KVM switch, and you then have access to as many as 1,000 machines from anywhere in the world.

(281) 933-7673
www.rose.com

Typical Application



UltraLink 2 provides remote KVM access over IP. Instead of going to a remote site to perform an upgrade or patch, it allows IT to access remote computers or servers without the expense of a trip to the remote site.

CLIENTS

MAY 9, 2008

Rugged, Portable Computer

NextComputing Vigor Evo HD Offers Added Protection, High Performance



WHEN MOST people think of rugged, portable computers, they usually envision the most dangerous jobs or the harshest environments. Many portable computers are fragile and susceptible to the elements, so valued information or even the most basic work functions need to have added protection. NextComputing's Vigor Evo HD addresses some of these issues.

The Vigor Evo HD is a flextop, high-performance mobile machine that utilizes the FleXtreme architecture. It features open standard components, support for COTS software and hardware, multicore processors, high-capacity storage, multiple OSes, and I/O functionality. This system is designed for applications that require a powerful workstation in a portable form.

The Vigor Evo HD is about the size of a briefcase and weighs about 13.5 pounds. The chassis offers a mounting kit that includes rugged hooks that can be used for the shoulder strap. This offers flexibility and ease of use in most environments.

The system's modular processor boards support up to two single, dual, or quad-core processors. The system offers up to three 3.5-inch 1TB drives or 13 200GB hard drives. It also includes internal RAID 0, 1, and 0+1 capabilities.

The Vigor Evo HD has an integrated 17-inch LCD with a disposable protective screen for glare reduction and added protection. The computer also has up to four PCIe or PCI-X 64-bit slots for single- or double-width cards. The internal chassis is mounted on rubber bumpers so there is no metal-to-metal contact with the outer chassis.

NextComputing Vigor Evo HD

Rugged, small, and lightweight computer built to handle powerful applications

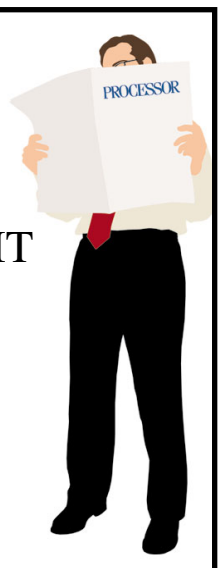
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www.nextcomputing.com

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Xtreme mobile computing

Product Releases

Do you have a new product that data center/IT managers would be interested in learning about?



Send your press release or related product information to press@processor.com.

Clients

■ **Honeywell** announced improvements to the Dolphin 7600 Mobile Computer, a compact, mobile computer equipped with GSM wireless technology and Windows Mobile 6 OS. Features include Integrated Adaptus Imaging Technology 5.0, which provides multifunctional data collection capabilities, as well as several wireless connectivity options. The Dolphin 7600 can connect to cellular networks, enterprise networks, and peripheral devices. The computer is designed for light industrial applications such as logistics, parcel delivery, and route accounting.

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■ **Novell** announced the availability of SUSE Linux Enterprise 10 SP2 (Service Pack 2), containing enhancements in virtualization, management, hardware enablement, and interoperability. Delivering Xen version 3.2, SUSE Linux Enterprise Server 10 SP2 includes several virtualization advances, including support for fully virtualized Windows Server 2008 and Windows Server 2003 and the live migration of Windows Server guests across physical machines. SUSE Linux Enterprise Desktop 10 SP2 provides improved interoperability with Microsoft Windows and Office via local NTFS support, improved integration with Microsoft Active Directory, and an upgrade to OpenOf-fice.org 2.4 Novell Edition.

SUSE Linux Enterprise Real Time SP2 improves the performance and predictability of time-sensitive applications running on SUSE Linux Enterprise Real Time through support for adaptive locking, OFED (OpenFabrics Enterprise Distribution) 1.3, and the Precise Timing Protocol. The SUSE Linux Enterprise SDK provides new capabilities in SP2, including updates to several tools. Novell also unveiled the Subscription Management Tool for SUSE Linux Enterprise to help customers manage SUSE Linux Enterprise software updates. SP2 for SUSE Linux Enterprise Server 10, SUSE Linux Enterprise Desktop 10, and SUSE Linux Enterprise 10 SDK are available now. SP2 for SUSE Linux Enterprise Real Time 10 and the Subscription Management Tool for SUSE Linux Enterprise will be available within 90 days.

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■ **Red Hat** announced the availability of Red Hat Enterprise Linux 5.2, which provides hardware and software support for users of Linux. Enterprise Linux 5.2 has been enhanced in six major areas, including virtualization, desktop, security, clustering, networking, and hardware support. Red Hat has also improved the capabilities of several hardware architectures—including x86/x86-64, Itanium, IBM POWER, and IBM System z—to raise performance levels of power usage, scalability, and manageability. Software fixes are provided by Red Hat when and if available and consolidated into Red Hat Enterprise Linux updates.

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■ **Ricoh Americas** launched the Ricoh Pro 906EX, Pro 1106EX, and Pro 1356EX Digital Imaging Systems. These systems are the first in a series designed to support the document management needs of CRD (central reproduction departments), Print for Pay, and data center environments by providing seamless integration of printing, copying, and scanning functionality. The Pro 1356EX prints at the speed of 135ppm, while the Pro 906EX and the Pro 1106EX print at respective speeds of 90 and 110ppm. In addition, the Pro 906EX, Pro 1106EX, and Pro 1356EX series incorporate high-speed color and black-and-white scanning. Advanced security options for all three models include a DOSS (Data Overwrite Security System), an Unauthorized Copy Control feature, and an RHD (removable hard drive). New binding systems include the Ring Binder RB5000 and Perfect Binder GB5000. Features such as the optional dual tray Interposer, along with versatile finishing options, enable users to produce professional-grade documents.

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■ **Wyse** has released new features for the Wyse Thin OS, including enhancements for virtual desktop environments from Citrix Systems, Microsoft, and VMware. Functioning as a "purpose-built" thin client operating system, the Wise Thin 6.2 features newly enhanced multimedia capabilities that support Citrix's Speedscreen Multimedia Acceleration Technology and result in reduced CPU server usage. In Citrix XenApp environments, end users can easily move around yet remain active on the network server without timing out. IdentiPHI SAFsolution 5 secures biometric and smart card users who access virtual environments.

Messaging & Telephony

■ **Dekart** released the latest version of its Dekart SIM Explorer, which is an intelligent cell phone card processing tool designed to view and edit the contents of GSM SIM, 3G USIM, and CDMA R-UIM cards. The Sim Explorer 1.1 ships with a faster SIM card-scanning mechanism and features the ability to work without the SIM card, read and interpret Unicode SMS, and display human-readable names. The Dekart SIM Explorer supports all PC/SC specification-compliant smart card readers and all 3G SIM cards. The Dekart SIM Explorer 1.1 personal or business license is available for $699.

Networking & VPN

■ **Cassatt** has announced Cassatt Active Response 5.1 software for its Cassatt Active Response products that monitors the changing demand on servers and automatically turns them off when they become idle. The software allows businesses to use demand-based policies to manage IT

Go to Page 18

Networking & VPN — May 2, 2008

No More Handheld Wireless Scans

SpectraGuard Online: Wireless Vulnerability Management



SpectraGuard Online gives the user reports showing possible and imminent threats.

Without the right wireless vulnerability management, no network is safe. As wireless becomes a business utility, the question is not how to keep wireless out but how to reap its benefits and efficiencies while managing your vulnerabilities. SpectraGuard® Online is ready to meet the need for low-administration, high-value security services. It's the most accurate, the most complete, and, at $2 a day, the most affordable wireless security solution available.

Scanning your airspace with handheld devices gives you only a point in time and is time-consuming and expensive. AirTight is the only wireless vulnerability management company to offer a flexible, end-to-end SaaS solution that gives customers visibility into their wireless security posture and choice in how they manage it. SpectraGuard Online is offered in three modules to protect your network from wireless threats and help you meet regulatory requirements—vulnerability assessment, regulatory compliance, and vulnerability remediation. The key components that make this possible are no capital investment, a predictable monthly service fee, and, with updates, no product obsolescence.

If you have been scanning your airspace with handhelds—or worse, not scanning at all—you can now have a cost-effective, automated solution in the SpectraGuard Online.

AirTight SpectraGuard Online

$50 per sensor per month

Wireless vulnerability management on demand

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- Single, 8 and 16 Ports Available
- No Software Required-PC Selection Via Front Panel Switches, Hotkeys or OSD(On Screen Display



Power Distribution Panel
- 1.75"x19"x6" Deep
- 8 Nema Power Outlets
  (120V Systems: 5-15R 120V/15A)
  (240V Systems: 6-15R 240V/15A)
- IEC 60320 C20 Power Inlet
- 20A/15A 90-135/180-250VAC
- 20Amp Emi/Rfi Filter
- Performance From 10Khz to 30 MHz

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SECURITY

MAY 2, 2008

Multilayer Security For Memory Cards

SPYRUS' Hydra Privacy Card Series II Digital Attaché Expands Security Coverage



DISK ENCRYPTION has been a valuable feature for hard disks, removable hard drives, and even USB flash drives for quite a while. Yet for other forms of storage, such as miniSD/SDHC or microSD/SDHC memory cards, their contents have generally been unprotected. The SPYRUS Hydra PC (Privacy Card) Series II Digital Attaché expands security coverage to removable media.

Digital Attaché comes in a USB flash drive form factor and can be used to store Vista BitLocker keys and other encrypted files. Its primary role, however, is as a host device for removable mini- and microSD/SDHC cards.

Security on the Digital Attaché is hardware-based, full-disk encryption, with an additional level of protection possible via file-by-file encryption. The device can be configured for multiple drives, so one compartment can be encrypted while another can have open access. Digital Attaché can write encrypted files not only to a miniSD/HDSC memory card, but also to a computer hard drive, a portable drive, and even an Internet-accessible storage drive.

Membership on a share list is required for access, including for specific files; a digital certificate, called a Hydra PC identity, can be created for specific users, who can then access files with a PIN. Digital Attaché can be configured to limit access to only certain workstations or workstation groups even if a user has a valid PIN.

Digital Attaché uses the strongest commercially available cryptographic algorithms and key lengths to secure data, including AES-128/192/256.

SPYRUS Hydra Privacy Card Series II Digital Attaché

$250 per unit

Secure storage with full-disk and file-by-file encryption for miniSD/SDHC or microSD/SDHC memory cards in a USB flash drive form factor

(408) 392-4303

www.spyrus.com

SPYRUS Security to the Edge™

NETWORKING & VPN

MAY 2, 2008

Keep An Eye On IP-Based Devices

CITTIO's WatchTower 3.1 Lets You Monitor It All



WatchTower 3.1 enables SMEs to monitor nontraditional devices, such as HVAC systems and point-of-sale terminals.

WITH THE VARIETY of IP-based technology in organizations, it can be difficult to monitor all of the devices that use your network. To help you monitor the equipment beyond the data center, WatchTower 3.1 includes support for products from 1,200 manufacturers. WatchTower 3.1 enables a "single-pane-of-glass" view into the performance of all network components from a single Web-based console.

WatchTower 3.1 offers a number of new enterprise-class features to address the needs of the real-time data center. New capabilities include root cause analysis, topology discovery and mapping, and native monitoring of database health and latency. Root cause analysis examines virtual OSes and containers, helping eliminate alarm "storms" to increase event management efficiency. The topology discovery and mapping tools can be automated across all nodes (including virtual machines), and WatchTower 3.1 can automatically build diagrams of root cause analysis relationships. Version 3.1 also features a Performance Management Database for analyzing performance data from both WatchTower and external sources.

IT staff and business managers can now fully automate the monitoring of both traditional and nontraditional devices to eliminate separate monitoring services. WatchTower 3.1 automatically discovers, monitors, and displays any performance or availability problems with scalability up to thousands of nodes.

CITTIO WatchTower 3.1

Perpetual license: Starts at $200 per node
Subscription license: Starts at $9 per node per month

Allows you to monitor the components in your IT infrastructure from a single, Web-based console

(877) 424-8846

www.cittio.com

CITTIO

Product Releases

Continued from Page 17

infrastructure in real time; increase compatibility and integration with third-party management solutions; and manage and control larger sets of technology and data center equipment from multiple vendors.

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■ **Certeon** launched its aCelera Virtual Appliance software to provide a nonproprietary virtual appliance for application acceleration. aCelera Virtual Appliance delivers up to a 95% reduction in application response time for applications being accessed across the WAN. IT managers can download and deploy high-performance virtualized acceleration environments for remote users and reduce the amount of single-purpose hardware in data centers and remote offices. aCelera Virtual Appliances are optimized to accelerate remote access to Microsoft Office, Microsoft Office SharePoint Server, EMC Documentum, eRoom, UGS Solid Edge, and other distributed applications. aCelera software will run on any standard x86 system and allows enterprises to mix and match application acceleration solutions for virtualized and nonvirtualized environments.

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■ **Cisco** introduced several products in its Cisco Motion product line: the appliance-based Cisco 3300 Series Mobility Services Engine and four software titles—Cisco Context-Aware Software, Cisco Adaptive Wireless Intrusion Prevention System, Cisco Secure Client Manager, and Cisco Mobile Intelligent Roaming. The offerings form a vital component of a complete Cisco-based mobility system for enterprises. The Cisco 3350 Mobility Services Engine will be available next month starting at $19,995. The Cisco Context-Aware Software will also be available next month, while the Cisco Unified Wireless Network Software Release 5.1 is available now. The Cisco Adaptive Wireless IPS Software and Cisco Mobile Intelligent Roaming Software will be available in the second half of this year, while the Cisco Secure Client Manager Software will be available in the first half of next year.

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■ **Citrix** added several components to its Citrix Delivery Center product family, an end-to-end delivery infrastructure platform for data centers. The Citrix Branch Repeater appliance amplifies and retransmits applications from the corporate data center to the branch office. The new Citrix Desktop Receiver and Citrix App Receiver software clients receive the centralized desktop and application deliveries. The Branch Repeater, Citrix Desktop Receiver, Citrix XenDesktop, and Citrix Ready desktop appliances are available now, while the Citrix App Receiver will be available for download in the second half of this year.

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■ **EMC** unveiled its EMC Smarts ADM (Application Discovery Manager) 6.0 Core to Version 6.0 to provide customers with support for VMware virtualized environments. New to EMC Smarts ADM 6.0 is Virtual Listener, which eliminates the need to deploy agents with every virtual machine. By "listening" to application traffic across the VMware switch, Smarts ADM provides insight into real-time virtual relationships, establishing dependencies of virtual machines to one another in delivering business applications. Smarts AMD 6.0 also allows customers to improve resource utilization, identify VMware ESX hosts, apply policy checks, understand application dependencies, and build data protection plans for VMware environments.

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■ **Ensim** has released Version 2.5 of its Unify Active Directory Manager, which includes the company's latest Web-based Active Directory management tools. The Unify software lets enterprises alleviate such common problems as provisioning, password management, role management, and auditing and compliance of Active Directory servers. The company says Active Directory 2.5 includes upgrades that eliminate much of the downtime frequently associated with configuration errors. Major enhancements included in this version include fine-grain role delegation, simplified policy-based provisioning, customizable provisioning policies, change and audio logs, enhanced alert notification abilities, multiple domain controller support, and an enhanced Web services SDK.

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■ New members of the Tivoli product family, IBM Tivoli Monitoring for Microsoft Applications and IBM Maximo Asset Management Essentials, are now available from **IBM**. The software is designed to help midsized businesses identify system management issues, asset protection, and data recovery and also manage critical enterprise assets such as production equipment, facilities, and transportation assets. The software is also designed to reduce operational costs.

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■ WS_FTP Server Web Transfer Module, a secure, browser-based module for use with WS_FTP Server 6.1.1, is now available from **Ipswitch**. The module is designed to make file transfers easy and secure for authorized users via a browser instead of software installed on the Desktop. Features of the module include simplified management, high security and flexibility, and the ability to alter or create files and folders on a remote server. Files are transferred over SSL with the encrypted HTTPS protocol.

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■ **Neocleus** announced Neocleus Trusted Edge to provide a means for employees, partners, and customers to connect to corporate resources from any endpoint, regardless of its state of security. Designed for dispersed organizations where employees, partners, and customers require tamper-proof access to company resources, Neocleus Trusted Edge uses an approach to virtualization that includes a Type 1 bare-metal hypervisor. The Neocleus' hypervisor uses open-source contributions that include enhancements the company made to the Xen Hypervisor to work directly on endpoints. Trusted Edge introduces a new security and IT management framework that establishes a separate virtual trusted environment outside of Windows. With Neocleus Trusted Edge, enterprises address the significant operational issues associated with managing and securely deploying applications, data, and services.

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■ **Netreo** announced its traffic monitoring system, OmniCenter Flow, which allows IT managers to gain visibility into network traffic patterns to better allocate network resources and costs. The system offers a broad range of monitoring options controlled through an AJAX-enabled Web interface and graphical reports. OmniCenter Flow also features site-based reporting, which allows for comprehensive visibility of remote-location traffic and application mix and long-term trending graphs that show application mix over time.

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■ **Opnet Technologies** has released an ACE Live 3100 appliance within the company's ACE live appliance line that's aimed at end-user experience monitoring. The release also includes the availability of the new ACE Live Release 6.2 software for integrated application performance monitoring and troubleshooting. The company says ACE Live is an end-to-end product that covers monitoring, measurement, and

Product Releases

detection of application performance violations, thus providing a look at all transactions and users across an enterprise. Real-time analytics allow for breaking down application response time to identify infrastructure parts that are contributing most to delays. Opnet's ACE Analyst can then drill down into individual transactions to find actual root causes of problems.

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■ **Replify** has released a product that embeds the new XDR (cross-protocol data reduction) technology in its Reptor application acceleration solution. This new bidirectional network caching technology allows for a substantial decrease in file transfer time over wide area networks. XDR technology provides indistinguishable or updated blocks of data that are sent only as references across network connections. This program is designed to boost download times and performance from the remote network user perspective by as much as 2,000 times.

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■ **Silver Peak** has released the NX-9000 as part of the company's NX appliance family. The NX-9000 is the industry's first gigabit WAN acceleration product, the company says. The NX-9000 can support up to 4Gbps of bidirectional LAN-side traffic and 1Gbps of bidirectional WAN-side traffic. Additionally, it offers 8TB of local data storage for WAN deduplication. The company says the NX-9000 offers four to 10 times the real-time throughput of competitive appliances. Additional features include two 10Gbps interfaces with EtherChannel bonding; support for more than 256,000 simultaneous TCP flows; hardware encryption; and optimization for such applications as TCP traffic, real-time UDP traffic, latency-sensitive traffic, and applications with dynamic data formats. The NX-9000 also uses network memory, network acceleration, and network integration technologies.

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■ **SonicWALL** has presented a new 3.0 firmware release for the SonicWALL SSL-VPN 2000 and 4000 platforms. The 3.0 release is designed to simplify the process for small to midsized enterprises to use and control their secure remote access and technical support in regards to the SSL VPN product line. The 3.0 firmware release for the SonicWALL SSL-VPN 2000 and 4000 platforms restructures remote access administration with an interface designed to be more intuitive and build on the SonicWALL Virtual Assist clientless remote support module. Also with version 3.0, IT personnel can initiate chat, transfer files, or launch the customer's Start menu or Task Manager.

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■ **SSH Communications Security** announced the availability of SSH Tectia Server 6.0 for IBM z/OS, a secure file transfer solution for IBM mainframe environments. SSH Tectia Server 6.0 can secure file transfers across and between z/OS, Windows, Unix, and Linux. It delivers automatic FTP-to-SFTP conversion and checkpoint/restart capabilities, which automatically detect and resend all or portions of a file if a transfer interrupt occurs. SSH Tectia supports key mainframe features such as Multiple Virtual Storage, Unix System Services, System Management Facility, and others.

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■ **Unisys** has expanded its family of real-time infrastructure solutions. New services include virtualization in real-time infrastructure, storage solutions, and a server that provides new options for enterprise computing. Using Unisys 3D Blueprinting, IT executives can achieve greater operational efficiency and trace business processes. In virtual environments, Unisys 3D Blueprinting maps IT goals and objectives; it's designed to accelerate infrastructure transformation. Clients can receive detailed information on the impact of virtualization through the Unisys Virtualization Operational Readiness Assessment service. Additionally, Unisys has announced the ES7000 Model 7405R server expansion that supports up to eight quad-core AMD Opteron processors.

Physical Infrastructure

■ **Advantech** has released the EKI-2701PSI Industrial PoE (Power over Ethernet) Splitter, which the company says lets users use a single cable to supply power and data to connected devices and equipment. When connected between a standard Ethernet device and a PoE connection, the EKI-2701PSI acts as a splitter that separates the PoE connection into a standard RJ-45 Ethernet port and removable screw terminal block that can supply about 13W of power at 24V. The splitter is packaged in a thin DIN-rail mount chassis and is suited for environments where space is limited. The EKI-2701PSI supports 10/100Base-T and gigabit 1000Base-T connections. The company also offers an EKI-2525P five-port industrial Ethernet switch for two or more devices needing a PoE power source.

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■ **Atlas Sales & Rentals** now offers the Office Pro 63 portable air conditioner from MovinCool/Denso Sales. The unit combines 60,000BTU per hour of cooling with 460-volt electrical power and has a 5-ton capacity that's designed to offer reliable cooling to large data centers, office areas, and other environments using 460-volt three-phase power. The Office Pro 63 includes a programmable digital thermostat, dual-speed fan, and automatic condensate pump. The unit measures 64 x 52 x 30 inches (HxWxD) and is available for rent or purchase. Atlas also offers additional Office Pro models in 115V and 208/230V versions.

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■ New from **Electro Standards Laboratories** is an 8-channel A/B switch with redundant power and remote ASCII command access. The switch, model number 7237, supports two devices on each of its eight channels. It can pass data and maintain the positions of its switches even during a loss of power. The switches can all simultaneously toggle on command. There's an optional Wide Range Power Supply (model 7507) available, as well.

Security

■ **Akonix Systems** and **Pivot** announced that Akonix's L7 Enterprise for Pivot 360 now offers logging of one-to-one text, chat room communications, and file transfers to Pivot 360. Pivot 360 lets institutional professionals manage information 360 degrees around a transaction, which enables financial organizations to catalog communication for retrieval and comply with electronic compliance requirements. Akonix's L7 Enterprise also offers mapping of Pivot 360 screen names to corporate directory user accounts and exports all communication to an email archiving repository. The new features help financial enterprises index pertinent information shared over Pivot 360 in an integrated archive for email, chat, online conferencing, and faxing. L7 Enterprise for Pivot 360 is available with the release of Version 7.1 of the L7 Enterprise suite of security and policy management software.

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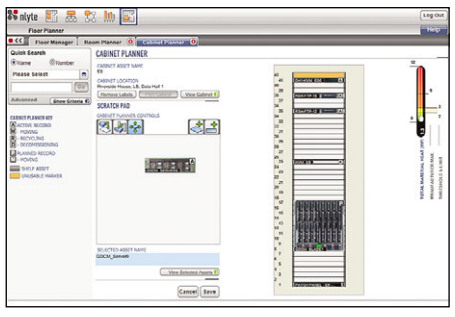
■ **Astaro** unveiled the latest version of its Astaro Security Gateway, a Web filter application designed for small and medium-

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Reduce Operating Costs

GDCM nlyte Optimizes Personnel, Processes & Physical Resources



nlyte lets you manage changes affecting power, cooling, space, and network physical infrastructure.

IT personnel are facing enormous problems managing a dynamic data center environment. Impacts of implementations, consolidations, virtualization, the retirement of IT assets, and even basic IT changes lead to the risk of overheating, increased power costs, new capital equipment expense, cable infrastructure road blocks, system downtime, and security risks that result in increased operational cost.

The nlyte software suite from GDCM (Global DataCenter Management) optimizes critical data center physical assets by visualizing, modeling, and enabling immediate feedback on planned and implemented changes to facilities, equipment assets, racks, devices, cables, connections, and power resources. The software lets users trend and analyze how current and planned changes impact redundancy, power, cooling, space, network, and cable capacity.

nlyte solves complex problems related to managing physical capacity, allowing the delay of capital expenses, and reducing operational costs related to power, space, and human capital. Companies using nlyte today are gaining the ability to model the data center, establish unified procedures and processes, integrate multiple systems, understand IT changes prior to implementation, and predict how power and cooling supply and demand will effect their entire global data center fabric.

Global DataCenter Management provides enterprise software products to support strategic planning and operation of some of the largest data centers in the world. The company, founded in 2003 and headquartered in California and London, England, is uniquely positioned to provide automation and analytic expertise, focusing on the physical infrastructure needs of medium to extremely large data center environments.

Global DataCenter Management nlyte

Lets you visualize, model, and manage your complex data center environment

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GDCM™

Product Releases

Continued from Page 19

sized enterprises that lets administrators recognize, classify, and block Skype connections and other popular instant messaging and peer-to-peer programs. Astaro Security Gateway 7.2 delivers highly granular access control, quality of service, and bandwidth control and is capable of identifying QQ, Winny, and other potentially risky protocols. Administrators can also set protocol-specific bandwidth limits and define exceptions to the internal security policy for individual IP addresses or endpoints. Astaro Security Gateway 7.2 is available as a virtual appliance or software ISO starting at $345.

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■ **Barracuda Networks** launched Barracuda Spam Firewall 1000 for Internet service providers and other large organizations with up to 100,000 concurrent email users and 5,000 domains in a single appliance. Barracuda Spam Firewall 1000 comes in a full-sized 2U form factor and includes 200GB for message log storage and 750GB for quarantined messages. In addition, the solution features redundant hot-swappable power supplies and dual gigabit Ethernet ports, and multiple Barracuda Spam Fire-wall 1000 models can be clustered for scalability and redundancy. Barracuda Spam Firewall 1000 will begin shipping this month and is priced at $89,999 for the appliance and $24,299 per year for a subscription to the Energize Update service.

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■ **Check Point Software** released Check Point Full Disk Encryption for Mac OS X, rounding out the platform's support for all major laptop and desktop operating systems, including Mac OS X 10.4.5 through Mac OS X 10.5. Check Point Full Disk Encryption is quick and easy to deploy and can scale to any size organization. Customers benefit from easy-to-use features and centralized management across diverse operating systems. Features include full-disk encryption, preboot authentication, automatic and transparent operation, and a multicertified cryptography engine.

Check Point also released ZoneAlarm ForceField, software that creates a virtualized browser session to prevent drive-by downloads, malware, and other Web threats from damaging the PC or stealing private information. By using a virtualized browser session, ForceField notes all unknown or unwanted changes from silent installs or drive-by downloads, and the changes disappear when a user is finished surfing. Additionally, ForceField's virtualization offers protection from malware that may already exist on the PC, such as keyloggers or screen grabbers. With ForceField, no behavior change is required from the users, so they can browse the Web without the traditional maintenance needed for virtual machines.

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■ **Endace** announced the addition of Snort IDS, Applied Watch Command Center Agent, and other data mining features to NinjaProbe. The passive capture capabilities allow network security engineers to choose a managed appliance running the most widely deployed open-source intrusion detection software system on segments up to 10Gbps. The ability to capture traffic to disk also helps ensure that, when a rule is triggered, network analysts can mine related data that traversed the network before and after the alert. NinjaProbe provides remote management capabilities for Snort rule definition, download, and alerting with data mining and platform configuration. Ninjaprobe also supports traffic filtering and Netflow record generation to let network operators deploy appliances that meet the full range of intrusion detection, data capture, performance management, traffic monitoring, and electronic surveillance requirements.

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■ **Global DataGuard** announced its Enterprise UTM security suite designed to prevent data leakage throughout an organization's enterprise. Enterprise UTM enables customers to track and block the electronic transmission of credit card information and Social Security numbers across a variety of access points, such as email and Web. Enterprise UTM features the use of raw packet data, the ability to factor in human intelligence, and the ability to adapt and customize itself to the unique requirements of the network over time.

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■ S-GATE, cross-DBMS (database management system) security software that prevents users such as DBAs, application developers, and outsourced personnel from viewing data in corporate databases, is now available from **Guardium**. S-GATE enables organizations to meet compliance standards and secure their corporate data without needing to modify databases, application code, or existing business processes. It also circumvents the need for logging and alerts. S-GATE features cross-platform support for all major DBMS platforms, ease of use for non-DBAs, and nonstop enforcement.

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■ **SonicWALL** has released the SonicWALL NSA (Network Security Appliance) 2400 for small and midsized organizations and branch offices, which provides UTM to businesses with fewer than 100 employees and lets IT administrators control their security in an intricate network environment. The NSA 2400 utilizes SonicWALL's RFDPI (Reassembly Free Deep Packet Inspection) 8 engine, which enables organizations to better manage network security and boost visibility of network activities. Without sacrificing performance, the NSA 2400 uses a multicore design to examine both inbound and outbound network traffic.

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■ StoneGate Management Center 4.3 offers unified management with customizable, graphical monitoring capability, says developer **Stonesoft**. It provides control over the security of virtual and traditional networks, as well as over software and StoneGate SSL VPN appliances. Version 4.3 offers monitoring with a variety of perspectives, including a real-time view, an executive summary, and a graphical monitoring portal. It also facilitates regulatory compliance and reduces the chance for human error in the network's security.

Servers

■ **HP** has announced the HP ProLiant BL2x220c G5, a server blade that combines two independent servers on a single blade and is designed to reduce floor space and power usage, as well as provide data center performance for scale-out environments. It's also designed to deliver 60% better performance per watt than other similar configurations. The BL2x220c features up to three

Physical Infrastructure

May 2, 2008

Eliminate Hot Spots

Cool Smarter With Opengate SiteX EC



Most data centers have hot spots. If you don't address hot air recirculation in a general cooling solution, the resulting inefficiency can cost you big bucks.

The new SiteX EC Containment Cooling systems from Opengate are intended to capture waste heat from IT equipment and give it a direct path back to the CRAC/H (computer room air conditioner/handler). Working in conjunction with your data center's existing mechanical infrastructure (the system fits on any equipment rack), SiteX EC uses a closed-loop control process and dynamic airflow scaling to route heated air directly to your facility's heat exchangers. Air is drawn out of the IT equipment through redundant, replaceable fan units, and hot air is ducted back to the CRAC/H units.

By keeping the hottest air in the room secluded from cooler air, the volume of delivered air can be reduced, and the temperature of the main air supply to the data center can be raised. That means that less energy is spent on cooling, which translates into lower power bills. Another benefit of segregating intake and exhaust air is improved uptime and component life, as cooler equipment typically lasts longer and runs with fewer problems.

The SiteX EC Containment Cooling system is ideal for a data center using a HDHC (high-density heat containment) configuration. It can work well with any method of cool air supply, including raised flooring.

The scalable system is available with fan units rated at up to 10kW (1,100cfm) or 20kW (2,000cfm) per rack. It offers remote management, airflow monitoring, and alarm notification over Ethernet.

Opengate SiteX EC Containment Cooling

Starts at $1,699

Cools your data center better, for less money, while delivering predictable temperatures to IT equipment

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Opengate data systems

Storage

May 2, 2008

Storage Done Right

Xiotech's Emprise 5000 & 7000 Offer Reliable & Flexible Storage



Storage is fundamental to any company, but there's really no alternative to storage systems composed of disk arrays in simple enclosures, right? Wrong. Xiotech has an alternative based on the company's patented ISE (Intelligent Storage Element) technology. The new Emprise storage systems employ one or more ISEs that consist of an integrated environment of single- or dual-sealed DataPacs. Each DataPac has up to 8TB of storage capacity, and each ISE provides dual managed reliability controllers, which locally manage cache, data protection processes; dual power and cooling units; and dual battery modules.

Xiotech's new Emprise 5000 direct- and switch-attached storage system and Emprise 7000 SAN system employ one and up to 64 ISEs, respectively, to virtually eliminate the need for service. The Emprise storage systems reduce heat and vibration, which are largely responsible for drive failures. Other preventive and repairing features include reconditioning and error-detection processes that locate and fix potential problems, redundant and hot-swappable components, self-healing processes that let each DataPac recover from a majority of failures, spare-in-place technology that automatically rebuilds data to another area when needed, and incremental data recovery for faster rebuilds.

Emprise 7000 supports the Web Services-based ICON Manager interface, optimal storage virtualization, distributed cluster architecture, intelligent provisioning, and data replication solutions.

Emprise storage systems can also scale from 1TB to 1PB. Storage Performance Council tests also verify the ISE's performance advantage over traditional storage.

Xiotech Emprise 5000 & 7000

Emprise 5000: starts at $21,000

Emprise 7000: starts at $85,000

An alternative to traditional disk-based storage systems that virtually eliminates the need for service

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Product Releases

times the density of traditional 1U rackmount servers, as well as management and configuration tools to help reduce costs and risk.

Storage

■ **Atempo** announced the latest version of its data protection and archiving solution, Live Backup, which lets storage administrators take more control of both remote and onsite desktop and notebook computing environments. Live Backup 3.2 now features reporting features, improved scalability per server, and data protection that automatically and continuously captures and tracks data modifications as they occur on any network-connected desktop or laptop for Windows, Mac, and Linux clients. Live Backup 3.2 also supports multiple administration levels and offers recovery capabilities such as self-serve file restoration of lost or accidentally deleted files and complete system recovery. The Windows version of Live Backup 3.2 will be available this month, with Mac and Linux versions to follow next month.

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■ **EMC** announced several new backup offerings to ease the burden felt by data centers facing expansion into the digital world. EMC Disk Library 3D 1500 and 3000 are LAN backup-to-disk systems complete with EMC's five-nines storage platform and IP replication that ensures availability, reduces backup data, and meets offsite protection requirements without transporting tapes physically. EMC Disk Library 4000 is an open systems virtual tape library with data deduplication and low-power disk drives that reduce power and cooling by up to 47%. EMC Avamar Data Store Gen 2 and EMC Avamar 4.0 are backup and recovery solutions featuring global source-based data deduplication technology and using 43% less energy per terabyte, which eliminates the strain put on infrastructure by backing up data. EMC NetWorker Fast Start is a deployment solution that cuts deployment time by up to 75% and decreases installation steps.

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■ **Fujitsu** announced the release of its 2.5-inch HDD series with support for 24-hour nonstop operation and capacities of up to 250GB. The Fujitsu 2.5-inch MHZ2-BK 7,200rpm and 2.5-inch MHZ2-BS 5,400rpm SATA series feature enhanced performance for extended-duty disk drive usage for business-critical and industrial applications that require higher storage capacity. The high-performance MHZ2-BK series is maximized for blade servers, nearline storage devices, telecommunication devices, and other data-intensive business-critical applications that require 24-hour operation. The MHZ2-BS series is designed to support industrial applications with 24/7 access, including surveillance cameras, industrial PCs, POS systems, ATMs, and robotics. Both the MHZ2-BK and MHZ2-BS series have extremely low power consumption. Fujitsu says it is one of few companies currently offering RV (rotational vibration) compensation technology for 2.5-inch SATA HDDs, which minimizes the adverse effects of vibration to maximize performance of applications under demanding operating conditions. The Fujitsu MHZ2-BS HDD series is available now, and the MHZ2-BK series will be available next month.

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Instantly Search Terabytes of Text



- dozens of indexed, unindexed, fielded data and full-text search options (including Unicode support for hundreds of international languages)
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Networking & VPN

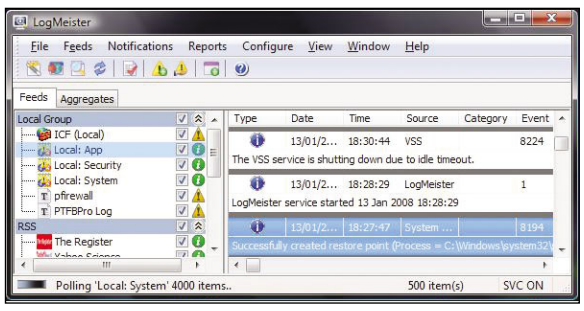
May 2, 2008

Centrally Monitor Log Data

Technology Lighthouse LogMeister 3.0 Can Warn, Take Action

As technology gets more complex, it's refreshing when network administrators can use a product that simplifies their tasks. Technology Lighthouse LogMeister 3.0 offers a comprehensive way to centrally monitor and analyze logs.

LogMeister will monitor your network logs in real time or according to a specified schedule.



The main LogMeister interface is designed to be user-friendly, with information presented in an easy-to-read format.

Logs include Windows event logs, text logs, RSS feeds, and XML. Users will be warned when significant events occur in the network, and LogMeister will control the central archiving of log data. LogMeister helps meet audit requirements, while also helping users with data analysis, early detection of security breakdowns, and hardware malfunctions. Other features include application and system debugging, error management throughout networks, monitoring of Web server log files, and the scrutinizing of RSS feeds.

As LogMeister analyzes data, it filters the data is read from the source, sorting out noise events. LogMeister looks for certain criteria in the data it inspects and then reacts by taking action such as producing an on-screen alert, sending an email, running a script, or creating a separate log.

LogMeister 3.0 adds features such as custom reports and outputting and bulk event feed created by an external file.

Technology Lighthouse LogMeister 3.0

$179.99

Centrally monitors and analyzes any log generated by an organization's systems and applications

++44 (0) 141 891 5884

www.tlhouse.co.uk/LogMeister

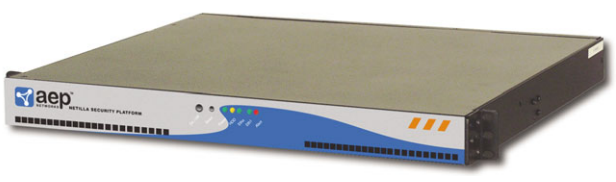
LogMeister
Log Monitoring and Notification

Networking & VPN

April 25, 2008

Remote Access, Secure & Easy

AEP Networks Netilla SSL VPN Offers Granular Access Control



For a business to thrive, every branch office, business partner, and remote user needs to have secure access to a company's business resources. Access for end users needs to be simple to use and broad in scope, while maintenance and cost for administrators should be low.

The Netilla SSL VPN 6.0 from AEP Networks offers secure access for users through any Web application or portal and with any Web-enabled device. The unlimited license bundle has a number of features, including Web reverse proxy, port-forwarding client, network-extension tunnel, Web-based file access, rNAC client integrity and cache cleaner, and full policy enforcement and support.

With a network adapter for Layer 3 tunnel connectivity, Netilla combines the security of IPSec with the ease and performance of an SSL VPN. The device integrates seamlessly with directories and can be managed through a simple Web-based interface.

For granular access control to critical data center applications, the SSL VPN 6.0 integrates with AEP's IDpoint, which extends identity-based access control through the network edge.

AEP Networks offers Netilla SSL VPN options for enterprises of any size: The SSL VPN 2000 is designed for 50 to 100 users, the 4000 model for 50 to 500 users, and the 6000/6100 model for 1,000 to 10,000 or more users.

AEP Netilla SSL VPN Release 6.0

Starts at $3,500 for the Netilla 2000

Offers secure, easy access to virtually any application in the data center for any authorized user

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Product Releases

Continued from Page 21

■ **Iron Mountain** and **IBM** announced plans for a unified offering that combines Iron Mountain's Accutrac software for physical records management with IBM's FileNet Records Manager. The combined software will provide companies with an effective way to view and manage both paper and electronic documents. The software will enable companies to organize and access their records—paper and electronic, active or inactive—in an easier, faster way.

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■ **MPC Computers** announced expansion shelves for its DataFRAME 2112 SAN appliance, designed to enable customers to increase their SAN environments with flexibility, which allows SAS and SATA drives to be deployed within the same shelf to optimize SAN design. The E-842R expansion shelf is a 2U MPC storage unit that houses 12 SAS or SATA drives, letting DataFRAME 2112 scale from 12 hard drives in a single 2U appliance all the way to 144 drives in a 24U design. Additionally, MPC now offers 10Gb Ethernet connectivity via an add-in card.

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■ NovaBACKUP 10 is the latest version of **NovaStor's** backup and disaster recovery software for Windows servers and PCs. Besides local and network-attached backup storage, version 10 gives users the option of backups to company servers or online storage services using FTP. The software includes a year's subscription to an online storage account. Another new feature is disk image-based disaster recovery, which rounds out NovaBACKUP's protection.

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■ New from **Perimeter eSecurity** is its Remote Backup & Recovery service, or RBR. With RBR, scheduled backups are encrypted and sent automatically to the company's two Level 3 data storage centers. Not only does RBR provide trouble-free, offsite data replication, but it also facilitates compliance with HIPAA, FFIEC, and other regulations. RBR offers flexible and powerful recovery, compression, and search capabilities, and it supports numerous file types (open or not), including Microsoft Active Directory, Microsoft Exchange, and SQL.

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■ **RAID** announced the X48 Fibre Channel RAID Head, a tiered solution featuring 12 4Gb Fibre Channel bandwidth ports to provide customers with continuous support of massive application performance and cost-effective SATA-2 for secondary data requirements. X48 also features StorageWatch, management software designed to reduce infrastructure TCO and operating costs; InfiniBand Networking, with a network switch that provides a virtual gateway for environments demanding extreme performance; and scalability and flexibility to support both DAS and SAN configurations.

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■ **Reldata** introduced its new 9240 Unified Storage Gateway as a cost-effective remote business continuity and disaster recovery solution. The 9240 replicates data from a Fibre Channel SAN to a remote iSCSI SAN over IP. The result is remote disaster recovery that won't interfere with the production environment. Reldata recommends the use of its 9240 Unified Storage System on the remote end.

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■ **Sonasoft** unveiled the latest version of SonaSafe Suite, which includes new features such as mailbox backups, customized ports, and improved replication and recovery capability. Designed to work with Microsoft Exchange, SQL, and Windows Server, this program guards data from hardware and software breakdowns and human mistakes. Preserving the redundant standby server, SonaSafe repeatedly updates the data retrieved from the primary system, and in case the primary system fails, the standby system can take over immediately. The standby system can be onsite or positioned at a remote site for shelter against natural or man-made disasters.

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■ **Verari** and **Xsigo** joined forces to release a high-density blade solution for virtualized network and storage connectivity. The BladeRack 2 X-Series computing platform, which integrates with Xsigo's VP I/O Director, provides IT management with the capabilities to more efficiently deploy virtual machines. This Verari and Xsigo solution promotes energy-efficient technology by increasing compute density, enabling lights-out management, and running more VMs per blade. IT administrators can remotely configure connectivity from blade to storage devices within seconds and quickly distribute I/O resources without changing network or storage configurations. CEO of Xsigo, Lloyd Carney, says, "Verari server and storage blade platforms and Xsigo virtual I/O help by delivering the highest compute density and the most flexible, easily managed connections to networks and storage. With this combination, IT managers can get more from each blade and do more with the resources they have."

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■ **Winchester Systems** announced the FlashDisk SX-1300 Series, a new disk array with small-form factor 2.5-inch disk drives. The four tiers of storage include Tier 1+ for database hot files, Tier 1 for primary storage, Tier 2 for enterprise applications, and Tier 3 for backup and archives. As a SAS/SATA storage solution, the SX-1300 can expand and support 1U, 2U, or 3U shelves. The FlashDisk SX-1300 Series offers up to 67.5TB of primary and secondary storage for SAS and Fibre Channel hosts. As a power-saving, high-performance base unit, the FlashDisk SX-1300 consumes 65% less power than standard 3.5-inch RAID arrays. According to Joel Leider, chief technology officer of Winchester Systems, the 2.5-inch drive improves performance and storage density and lowers power and cooling requirements while offering flexible tiered storage, all in one simple storage architecture.

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■ **Xiotech** announced Virtual View, a new add-on for the ICON Manager user interface that is designed for users of Xiotech's Emprise 7000 and Magnitude 3D 4000 storage systems and allows for control of VMware environments from a primary interface. Users can now view array, VMware ESX, and virtual machine storage layers from one console, which allows for simpler storage management. As a plug-in, Virtual View integrates with VMware APIs and automates the development of virtual disks. Additionally, administrators have the ability to explore and map VMware ESX hosts, storage relationships, and properties. Virtual View can also cut down on operational errors and make storage more accessible. Current Xiotech customers are not required to pay an additional cost for Virtual View.

Primary Storage Data Compression

The Storwize STN-6000 P Series Maximizes Storage Space



OPTIMIZATION used to be the elephant in the room. Now, it is a growing concern that is being addressed by every company looking to manage their costs, efficiency, and performance. Storwize has improved on their STN-6000 series of compression appliances and introduced the new P Series.

The P Series is comprised of three different models that are designed for various business environments. The STN-6300p is considered the entry-level model but is just as efficient and reliable as its higher-end counterparts. The STN-6500p is a perfect fit for environments in the enterprise. Enterprises that perform large amounts of processing with even larger volumes of files may want to look into the STN-6800p, which is the high-end offering from Storwize. Each model can also be upgraded to a High Availability configuration, if desired.

Storwize has designed the P Series to increase the data center lifecycle. One of the most important things about the STN-6000ps is that there is no internal hard-drive and there is no user data on the appliance itself. Also, the P Series is invisible to storage applications.

The compatibility of the P Series is another defining feature. The different models will work with Microsoft CIFS, NTP, ARP, and multiple other protocols. They are also designed to work with ORACLE and MS/SQL databases.

Storwize has multiple host-based utilities that work hand-in-hand with the P Series. The Storwize PrediSave predictive tool, Storwize Compression Accelerator, and Storwize Revert are all added solutions that improve the overall effectiveness of the system.

Storwize STN-6000 P Series

Addresses problems that are associated with optimizing storage and improving overall efficiency

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WHEN IT COMES TO archival storage capacity, the only certainty is the need for expansion. Unless you're grossly overprovisioning your data center's storage requirements now, you can pretty much count on having to scale up your capacity every few years as your business grows.

The Spectra T200 is the latest tape library in Spectra Logic's T-series. It's a 20U rack-mountable system with two high-performance LTO-4 tape drives and 50 tape slots (80TB). It's expandable to a total of 200 slots (320TB) and eight full-height or 16 half-height drives, plus up to 40TB of optional hard disk-based VTL storage. But this level of scalability is only the beginning.

Because the T200 is equipped with the company's TranScale feature, administrators can migrate the storage system's components to a larger chassis (such as the T380, T680, and T950) as needed. Spectra Logic says that TranScale chassis migration provides much better reliability than traditional stacking module or pass-through expansion schemes. TranScale allows the T200 tape library to grow from 50 slots to more than 10,000. In other words, the 80TB tape library can scale up to a whopping 16 petabytes. There's even an available Assisted Self-Maintenance option that provides users with an onsite complement of components to make migration easy.

Spectra Logic's BlueScale software manages the tape library's operation with an easy-to-use graphical user interface. BlueScale is the only such GUI library administration system that supports LTO-4 encryption key management, the company says.

Spectra Logic Spectra T200

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2U Server - ASA2121i

1 CPU, Intel Quad Core Xeon 5310, 1.6GHz 8MB
1GB (2X512MB) 667MHz FBDIMM Installed,
6TB (12X 500GB) SATA II Installed, Max - 12TB.
1X 12 Port SATA II RAID Controller Installed.
2U Rackmount Chassis, 500Watt Redundant PS.
12 Drive bay, Rails Included.
Price Starting at: $4275/-



3U Server - ASA3161i

1 CPU, Intel Quad Core Xeon 5310, 1.6GHz 8MB
1GB (2X512MB) 667MHz FBDIMM Installed,
8TB (16X 500GB) SATA II Installed, Max - 16TB.
1X 16 Port SATA II RAID Controller Installed.
3U Rackmount Chassis, 800Watt Redundant PS.
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5U Server - ASA5241i

1 CPU, Intel Quad Core Xeon 5310, 1.6GHz 8MB
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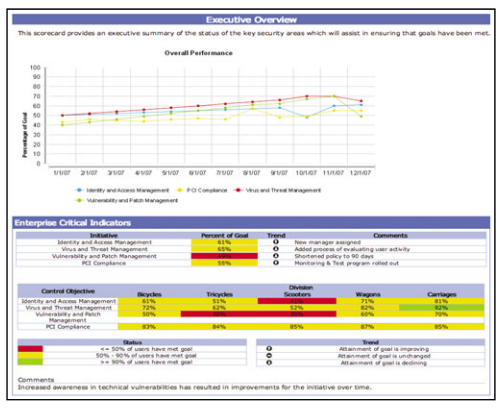
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IT & Security Metrics

ClearPoint Security Performance Manager 2.0 Communicates Results

HIGH-PROFILE organizational failures coupled with threats of information system disruptions have elevated IT and information security performance control reviews and transparency to a board-level issue. The current business climate mandates that organizations adopt IT and information security governance programs. ClearPoint Metrics has created the Sec-urity Performance Manager 2.0 to deal with these challenges.



Scorecards include hard facts and data from metric results, improving decision-making and evidencing controls.

The Security Performance Manager 2.0 automates the entire process of designing, calculating, and communicating key IT and information security performance metrics to all levels. Best practice content packages deliver the data to support risk evaluation and mitigation efforts, saving time and cost in compliance assessment, reporting, and audits. ClearPoint Metrics offers four packages: Identity and Access Management; Vulnerability and Patch Management; Threat and Virus Management; and Compliance Management.

The solution is designed to deliver reliable, trusted, and auditable metric results presented in the business context and aligned with operational goals. As a result, IT and security teams can regularly assess and communicate IT and information security posture and enable business unit executives to understand their role in safeguarding information assets.

Features include customizable presentation "views" for scorecards, new data adapters for security element managers, and improved processing scale with the ability to run multiple production servers.

ClearPoint Metrics Security Performance Manager 2.0

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IT ADMINS need to maintain a reliable network environment. To help them do that, Tandberg has upgraded its TMS (Tandberg Management Suite) for telepresence and high-definition videoconferencing with enhanced diagnostics, monitoring, and scheduling options.

With total network visibility and centralized control, TMS offers end-to-end management for onsite and remote video systems. It uses a Web-based interface for scheduling, call launching, and accessing phone directories. Through this user-friendly navigation tool, admins can also monitor network statistics, organize booking, and perform software updates. Event notification alerts warn users of negative service levels before a problem occurs.

TMS can allocate and connect management resources. Users can easily plan video, audio, and Web conferences; the Conference Control Center allows for real-time schedule management.

TMS sustains multiple vendors to manage video networks and deployment. The new version features automatic upgrades for videoconferencing endpoints and infrastructure software and now supports Polycom HDX endpoints and Tandberg Codian Multipoint Control Units. It continues to support Sony, Radvision, Cisco, Aethra, VTel, and Polycom product lines. TMS also integrates with collaboration tools.

Tandberg Management Suite

The TMS Server appliance starts at $13,900, with preinstalled Tandberg Management Suite and Scheduler; a free 30-day trial version is also available

Video management platform that provides centralized management, diagnostics, monitoring, and scheduling options for videoconferencing networks

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BOOK REVIEW

Integrating Web 2.0 Into Your SME

"Web 2.0: A Strategy Guide" Gives Real-World Examples For Using The 'Net

by Chris A. MacKinnon

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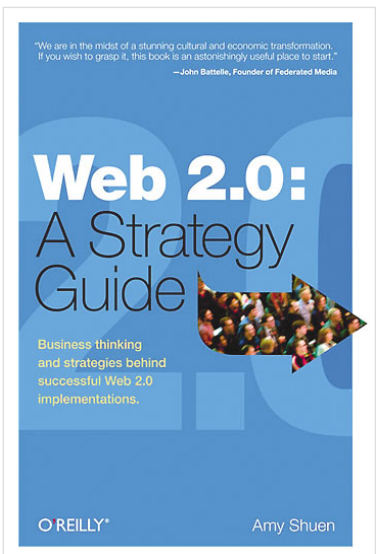
MOST WEB 2.0 FANS will tell you that the Web is revolutionizing the way companies are doing business. To say that the Web has matured significantly since Web 1.0 is a massive understatement. While Web 1.0 deserves its place in history, it's Web 2.0 that is Amy Shuen's focus in "Web 2.0: A Strategy Guide." Shuen's goal is more than just defining and expanding on the concept; she explains in detail what's different about Web 2.0 and how those differences can improve your company's bottom line.

Transformations

It's no secret that Internet business is making headlines, but how exactly is the Web transforming some companies into billion-dollar enterprises? For example, how did Flickr turn user value into its own value? And considering that Google doesn't charge a cent for its Web search capabilities, it's amazing how wealthy the company has become and how it has transformed business on the Web. In this book, Shuen shows how to model this transformation for your own business using existing resources and specific Web 2.0 integration practices.

"Web 2.0: A Strategy Guide" will help you understand why managers and executives of large companies are having to shape their whole way of thinking around revenue-sharing in a Web 2.0 world. The author helps you envision a business world where small and midsized enterprises (and even smaller companies with one owner) can benefit from using specific business models to their advantage.

You don't have to be a programmer or Web developer to grasp the main concepts in "Web 2.0." And you don't need a business or computer science degree either, only a handle on basic business concepts and an understanding of how the Web is structured.



Web 2.0: A Strategy Guide

Author: Amy Shuen

Publisher: O'Reilly Media

Price: $24.99

Format: Hardcover, 266 pages

A Source Of Revenue

Most of the weight behind Web 2.0 is focused on teaching you how to make money using the Web's network effects. Real-life business stories show you how to take advantage of these network effects. The book helps you apply this knowledge to companies of all sizes, including Fortune 500s and multinationals. You will learn that by using Web 2.0 strategies, any knowledge-based business can tap into the Web as a source of revenue.

Chapter one begins by showing how users themselves create value in a Web 2.0 world. The new Web sees how businesses, customers, and partners interact with each other, which creates a plethora of new business models. Chapter two deals with how networks actually multiply the effects of Web 2.0 by using the analogy of how cars on the highway at rush hour create negative network effects. In real life, things get congested, but in a Web 2.0 world, too much traffic creates a perfect world. Chapter three talks about how people build connections through the concept of social networking.

Chapter four, called "Companies Capitalize Competences," touches on how companies are being forced to reconsider different strategies to compete in a Web-based world. Chapter five, "New Recombines with Old," gives credit to the old way of Web life. While much of the book shows that Web 2.0 is different, Shuen points out that the differences don't mean that the old way stops completely. Finally, chapter six discusses businesses incorporating strategies, encouraging readers to take their new knowledge to the next level and apply it to business. No matter what business capacity you are in, if you are doing business on the Web, this book can act as a handy guide. P

KEY CONCEPTS

This book is purely about Web business strategy. Instead of focusing on the technology of Web 2.0, the real-life business examples in the book center on the Web's effect. To create a successful Web 2.0 business, you have to create the arena for people to meet together to share opinions, outlooks, and experiences. This book shows how word-of-mouth is fueling the entire Web 2.0 enterprise. Without the people, there is no Web 2.0.



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Strategies For Setting Spam Filters

Finding The Right Balance Between Overkill & "Anything Goes"

by Bruce Gain

• • •

SPAM AND THE MISCREANTS who benefit from the Internet scourge are not going away anytime soon. While spam as a percentage of the total of all email sent has remained stable, its incidence remains significant. According to MessageLabs (www.messagelabs.com), intercepted spam accounted for about 84.6% of all messages received last year, compared to 86.2% in 2006.

Developers have also become more sophisticated in the ways they seek to skirt filters. The increased use of text- and HTML-based coding helped millions of illegitimate email messages reach their targets last year, MessageLabs says.

So as developers become smarter and the threat remains high, protecting the enterprise from spam has not gotten easier. A few guidelines, however, can help you to establish a sound strategy that meets your users' needs while providing the necessary protection.

Spam Overkill

It is relatively easy to lock down your network users' inboxes to the highest degree possible so that almost no spam flows through to their inboxes. But doing so, of course, will likely mean that the filter is blocking many legitimate messages, as well.

"When seeking a solution, consider not only the hit-rate for spam but also the degree of false positives (nonspam incorrectly stopped) and false negatives (or spam allowed through)," says Paul Wood, a senior analyst for MessageLabs. "A system with a high rate of aggression for spam is likely to result in a high number of false positives, so the time saved in managing the users' inboxes is then lost through those users having to rescue nonspam messages from the spam quarantine. It may be tempting to consider a system that claims to stop 99.9% of all spam, as indeed it may, but you may also find that it also stops a lot more of the legitimate mail."

Yet a lax filter can mean that employees will routinely receive inappropriate solicitations. Achieving the right balance between an overly aggressive filter and one that is too lax involves a lot of fine tuning, usually only after the filter is implemented.

"[Implementing] antispam solutions to filter out as much spam as possible without impacting negatively on the flow of good business communications isn't as simple as it may at first sound," Wood says. "The level of accuracy for most antispam solutions straight out of the box isn't as high as most users would like, and in order to raise that level, the filter needs to be trained or to learn about what users consider spam and what they consider nonspam."

The viability of different solutions, which comprise both appliances and software, can vary according to the size of the enterprise and the amount of email traffic. A large enterprise with high-volume email needs might require an appliance, while software solutions may be just as efficient for smaller-scale needs.

Setup and maintenance difficulties are also factors to consider. Adopting a solution that does more than just serve as a spam filter can make life easier, as well. "Companies should look for solutions that are easy to set up and maintain and that offer multiple protections against a variety of email threats, from spam to viruses to phishing attacks and more," says Kylie Heintz, spokesperson for Barracuda Networks (888/268-4772; www.barracudanetworks.com).

Protecting the SME from spam has not gotten easier. A few guidelines, however, can help you to establish a sound strategy that meets users' needs while providing the necessary protection.

User Interaction

As is often the case in the IT field, an antispam strategy involves a close collaboration with the network's users, especially when it comes to setting up a new spam solution.

"It's important when implementing a solution to inform the users what is happening and what action they should take if they are seeing spam that should have been stopped," Wood says. "It is important during the early stages of any implementation to encourage this type of feedback, as this is the best way to improve the level of accuracy for the filters."

Indeed, what might constitute spam for one user will represent legitimate messages for someone else, so it will often be up to the users to communicate whether they are receiving messages as they should or if too much spam is reaching their inboxes.

You then will likely find yourself manually adding senders' addresses that the filter previously blocked to the whitelist while blacklisting illegitimate messages that somehow got through.

Educating users about how to flag spam is also important. If someone reports a legitimate newsletter as spam instead of unsubscribing to it, the filter could then begin to block the newsletter from reaching users who want to receive it, Wood says. "Conversely, if newsletters are caught by the filter, then they also need to be flagged, to ensure improved levels of accuracy," Wood says.

Not Always Elegant

Unfortunately, the situation sometimes arises when the admin must go through the time-consuming process of trying to determine why a particular user did not receive an email. Doing so involves determining if it was the spam filter or something else that prevented the email from coming through.

"Someone might say 'Hey, I am not receiving any email from Bob,' and so I have to look to see if Bob is getting blocked by the spam filter or if there is something else going on," says John Matzek, co-chief executive officer of Logic IT Consulting (www.logicitc.com). "I find that more than half the time, there is something else going on, like Bob's system isn't sending properly or Bob is sending to the wrong address. It is often a challenge to discover whether it is the spam filter that is the cause of the problem or not, which comes down to just logical troubleshooting."

If you find yourself spending too much time finagling with your enterprise's spam filters, third-party solutions have become more reliable—and less expensive.

"Consider the amount of time required to manage an in-house solution; it may be better for your ISP to provide a service for you, especially if that service is in the cloud, as you may benefit from the experience of a provider who specializes in this area," Wood says. "Outsourcing to a company that you can trust also means that you don't need to have a dedicated IT department to solve the problem internally." P

Spam's Target

The amount of spam a particular business receives varies among different industry sectors. According to MessageLabs, manufacturing businesses are assumed to have a high number of users, which is why it is the most-targeted sector. The top five target business sectors are:

1. Manufacturing
2. Agriculture
3. Education
4. IT Services
5. Marketing/Media

SOURCE: MESSAGELABS

Spam Kill Checklist

Antispam software and hardware appliances have gotten better at filtering out spam, but unfortunately, spam developers have become more savvy, as well. A one-size-fits-all solution does not exist, either; it remains up to the admin to play a hands-on role in the spam battle. A few things to keep in mind include:

- User interaction is critical, as network users need to communicate whether too much spam is getting through to their inboxes or the filter is blocking too many legitimate messages.
- If your filter is blocking virtually every spam message sent your server's way, you can assume the filter is too aggressive.
- The appliance or software solution you select should be geared for the number of users on your network.
- Sometimes it can make sense to rely on a third-party service to manage your spam filter, especially if you are short on staff.

Managing IT Over IP

ServReach Product Line Offers KVM Over IP Networks

THERE IS NO DOUBT that managing servers is crucial to a business' success. Being able to access and manage your machines from anywhere, any time over IP would be a huge boost to the ability of managers to monitor and take care of systems. Black Box has put the power of IP functionality into the hands of IT managers with the ServReach family of KVM over IP switches. The family includes KVMCube, KVMGate, KVMultiport, and KVManager.



KVMCube is a palm-sized KVM device that, in addition to providing full BIOS access, allows users to install or recover applications or OS patches without being physically present. With virtual media support, users can move files from a remote device to a computer in the data center.

KVMGate is a device that adds IP functionality to previously installed KVM switches that don't have it, extending full KVM access to users. The device features 128-bit SSL encryption and username and password configuration. No software installation is required for KVMGate, making it simple to implement. Utilizing the KVMultiport, users can access up to 16 target servers. KVMultiport also enables users to work with servers that are places up to 100 feet from the switch.

Each of the ServReach switches can operate as a stand alone device or they can be optionally managed by the KVManager, which unifies IP-enabled switches across the network and alleviates the confusion of manual management. The interface is designed to be intuitive and logical, yet also secure courtesy of its LDAP-based security system.

Black Box ServReach KVM Over IP Switches

KVMultiport: $1,499.95; KVMCube: $499.95; KVMGate: $699.95; KVManager: Starts at $5,899.95

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New Security Strategies

Manufacturers Are Staying Ahead Of The Game To Keep You Safe

by Chris A. MacKinnon

• • •

Security manufacturers are constantly inventing new ways to secure the enterprise. It seems like new strategies, technologies, and product combinations are hitting the market every day. This is a good thing, considering the fact that Symantec (www.symantec.com) just released its Global Internet Security Threat Report, which indicates that the United States, for example, accounted for 31% of all malicious activity (up from 30% from the first half of last year). Here are a few manufacturers that are offering ways to battle the onslaught of security threats that are an issue for the small to midsized enterprise.

Safend

One security item that is prevalent among small to medium-sized enterprises lately is endpoint security. Gil Sever, founder and CEO of Safend (www.safend.com), says the need for endpoint security is becoming more prevalent due to a lack of proper training. "A recent study conducted by the Computing Technology Industry Association showed that nearly 80% of respondent organizations allow their mobile workers remote access to data on corporate networks, and less than one-third have implemented any security awareness training for those staffers," Sever says. "Furthermore, only 10% of organizations plan to offer new security training in the coming year related to the use of PDAs, smartphones, laptops, or other mobile devices."

According to Sever, IT managers are seeing that there is a new kind of interoperability challenge that organizations are facing as a result of deploying multiple agents on the endpoint. He explains, "Oftentimes organizations utilize a variety of vendor solutions to secure the information housed on their networks. A company may use one vendor for antivirus protection, another for their encryption needs, and yet another for device control and other endpoint data leakage prevention solutions." Sever says many companies overlook whether these products will work well together within their organization.

Sever says Safend has a quality assurance and interoperability lab to ensure Safend's solutions are interoperable with not only the operating systems customers and partners use but also other vendor solutions. Safend ensures compatibility with hardware, software, and operating systems by testing solutions against 32 different Microsoft operating systems and more than 120 different software applications.

Sever says organizations today need to expand their perimeter security to the unknown, mainly due to the fact that you don't know where your workers are and what they are using. He says one of Safend's products includes encryption and compliance features central to endpoint data leakage prevention. Sever says the technology includes new features, including built-in compliance policies for HIPAA, PCI, and Sarbox; file shadowing; enforceable external storage and removable media encryption capabilities; as well as protection against hardware keyloggers.

Sophos

Mike Haro, senior security analyst at Sophos (www.sophos.com), says his company recently released the industry's first fully unified endpoint security and NAC solution. "Historically, it's been challenging for endpoint and desktop managers and IT administrators to know if their users' computers are safe, protected, and compliant with corporate policies," Haro says. "NAC has been seen as the answer to this problem, but the technology has often been beyond the reach of most companies in terms of budget and resource." Haro says Sophos addresses this pain by providing products that offer preventive protection and are simple to roll out.

Fortinet

Jason Wright, senior product marketing manager at Fortinet (www.fortinet.com), says his company is offering a new way to deploy security throughout the enterprise network. Fortinet has developed a security appliance with an abundance of ports (10 ports as a base model and 14 ports with an expansion card) and high throughput so that enterprises can deploy security throughout the LAN instead of only at the perimeter. He says the appliance is able to inspect at line rates so it does not slow down LAN traffic on Gigabit-per-second links.

Wright says deploying in this fashion requires several ports to place inspection at several points throughout the LAN. "Large enterprises have been doing this for some time because they can afford high-speed devices with high port count. Until now, midrange devices (under $10,000 list price) have never offered enough ports or throughput to do this, historically leaving midrange networks to deploy security only at the perimeter, leaving LAN segments vulnerable to each other," he says. "Deploying protection at LAN segmentation points enforces a more granular policy, isolates security events introduced from the LAN side (think traveling salesperson who plugs into the LAN with an infected laptop), increases security, and gives IT administrators more control and visibility over their network."

In Wright's opinion, Fortinet devices offer an evolved way to deploy security in a network. "Many organizations have deployed multiple security devices (firewalls, IPS, antivirus gateways, antispam, and Web-filtering gateways, etc.) to leverage new technologies against new threats," he notes. "This leaves a customer with five security products, five management consoles, [and] five vendors to deal with and also creates difficulty when trying to troubleshoot. Let's not forget high operational costs, as well as the high capital expenditures to buy all that equipment."

eEye

Morey Haber, vice president of product management for eEye (www.eeye.com), says his company is offering a new way of thinking about security and integrated threat management for the SME. eEye offers a standalone tool (fixed appliance) in a small form factor that allows you to place the tool in a closet without the need for a rack. Haber says when an enterprise combines the native capabilities of the tool with another product called Iris Network Traffic Analyzer, it can perform vulnerability assessment and analyze traffic patterns all in one host. He says the appliance has dual gigabit NICs, so looking for abnormal traffic is "a breeze without repatching the device."

Haber says eEye solutions have traditionally been available only as software. He says eEye presently offers vulnerability management in any form factor to meet a client's needs. The software and appliances are fully compatible, and clients can mix and match a vulnerability assessment architecture to meet individual needs. As security needs change, client needs change, as well. It's all part of keeping the enterprise locked down. P

Latest Endpoint Security From Safend

"Security professionals are wary of the uncontrolled endpoint access via convenient endpoint connections like USB and Wi-Fi," says Gil Sever, founder and CEO of Safend (www.safend.com). "Business and security executives are always looking for solutions that maintain a balance between employee productivity and freedom [to] use removable devices in their computers, while still ensuring robust data security. Our solution provides small to midsized enterprises with the visibility and control needed to securely utilize new communication and removable storage technologies while maintaining increasingly stringent regulatory requirements."

Cross-Platform Server Isolation

Apani Networks (www.apani.com) has developed a security concept where servers, endpoints, and business-critical data are isolated into security zones. After computers are isolated in zones, Apani's EpiForce controls access to these zones and encrypts communication between the computers in the zones (the platform type and the physical location of the computers do not matter). This is a layered approach that mitigates risk if a breach occurs.

Apani's EpiForce solution provides cross-platform server isolation through a software-based architecture that enables the following disciplines:

Logical Security Zoning: Enables a large, flat corporate network to be separated into isolated security zones without reconfiguring the network and without regard to physical location.

Policy-Based Encryption Of Data In Motion: Enables encryption to be applied in a granular, port-level deployment, encrypting only those communications required to be confidential.

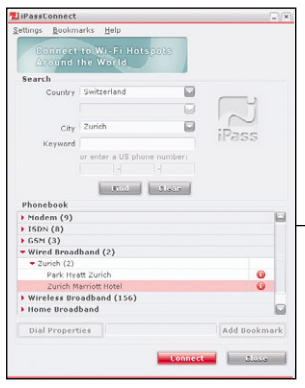
IT managers are seeing that there is a new kind of interoperability challenge that organizations are facing as a result of deploying multiple agents on the endpoint.

Wi-Fi & 3G Combined

iPassConnect Gives Users A Choice

When making a decision between using a 3G network or a Wi-Fi hotspot, the choice is not always clear. Some Wi-Fi hotspots have to be paid for while others are unreliable, at best. 3G networks only have good reception in areas where cell phone coverage is available.

The iPassConnect mobility service was created to bridge the gap between these two networks and give the user a choice between all available wireless sources. It also allows for wired hotel broadband and global dial-up.



iPassConnect lets the user choose between multiple Wi-Fi hotspots and 3G.

iPassConnect will work on any laptop running Windows 2000 or newer and is designed with a user-friendly interface. There will also be a version for handhelds that will run on Windows Mobile.

iPass has a nationwide 3G network that can give the user up to 1.4Mbps data rates and near-broadband Internet speeds. A global dial-up network allows local modems to call to more than 160 countries.

Signing up for iPassConnect is easy: Visit the company Web site and sign up for the plan you want, then you'll receive a plug-and-play preconfigured 3G card that lets you connect to the network.

iPass has taken 3G and Wi-Fi networks and combined them into one service that only requires one monthly fee. With more than 95,000 business-friendly locations, including more than 20,000 hotels and 1,000 hotspots in more than 500 airports, the iPassConnect can help any on-the-road worker stay connected and remain efficient.

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Virtual FTP

An Idea Whose Time Has Come?

by Sandra Kay Miller

• • •

VIRTUALIZATION IS A HOT TOPIC. Manufacturers and software developers are pushing virtualization into new applications. As Web browsers and file managers can connect directly to FTP (File Transfer Protocol) servers, increasingly, organizations are considering adding FTP into the folds of virtualized environments.

Kevin Gillis, vice president of product management and development for the Ipswitch File Transfer Division (www.ipswitch.com), thinks that virtualization is untapped within the file transfer space. He says, "The number of people virtualizing FTP at this point is pretty small."

However, as compliance has driven better accounting measures for the transmission of information on an organization's network, the industry is starting to shed light on a long-standing computing protocol that many have taken for granted. Gillis has witnessed some rude awakenings. He notes, "The compliance department starts digging into their file transfer platforms, and some are appalled to the extent they tell the group that's managing the current IT infrastructure they [the compliance department] aren't going to take responsibility for it."

With the growth of customer-facing applications, much of the underlying technology includes file transfer protocols such as FTP, Secure FTP, and SSH. Tasked with requirements for security, compliance, and high availability, data centers are turning to virtualized environments for more control over their infrastructure.

Up & Coming

Gillis is just now seeing Ipswitch customers starting to apply the benefits of virtualization to their file transfer platforms. "The organizations who see file transfer as a business process understand the implications of virtualization of FTP," he says.

Enterprises are turning to virtualizing file transfer as they recognize the importance of their data. Due to the mission-critical yet not resource-intensive nature of FTP, Gillis views it as a perfect candidate for creating a high-availability environment through virtualization.

"Depending on your business needs, there's a lot of challenges that can be solved with high availability," Gillis says. For example, implementing load balancing within the file transfer infrastructure delivers better performance and uptime. For times when servers are experiencing increased traffic, it can automatically be spread across multiple virtual servers.

Additionally, clustering and disaster recovery can be better managed when virtualized. "If one server goes down, I want to spawn another server on the spot in real time from a hot or cold backup. That's a perfect situation for virtualization. It's not used a lot, but when it's used, it's mission-critical," says Gillis. "It's pretty impressive to have an image spawn itself on the spot based upon predetermined rules, such as a server isn't responsive for 30 seconds. It will increase speed, efficiency, and overall agility of your IT infrastructure."

As more data centers retool their file transfer platforms, they are deploying highly sophisticated systems using virtualization in a distributed, clustered environment. The combination of load balancing and performance, clustering for high availability and then distributed clustering for disaster recovery are areas where it makes more sense to implement virtualized FTP. Not being very CPU-intensive means other applications can be hosted on the physical server, as well, allowing for more physical consolidation within the data center.

Get Started

Data centers currently virtualize a number of types of servers—Web, application, database, email. Virtualization ensures that mission-critical infrastructure has high availability with maximum performance.

For data centers interested in virtualizing FTP, Gillis suggests starting with a full inventory of all scripts, processes, and applications that are performing file transfers in and out of the company. "Most companies are surprised by how much data is moved around, completely in the clear, unencrypted, no integrity, no repudiation, [and] highly unauditable," he says, "and the person who wrote the scripts is retired or moved on to another job, and they didn't document any of it." With a full audit in hand, data centers can then map back to stakeholders, such as IT, compliance, and other business units within the organization.

Next, file transfer requirements will need to be aligned with business policies, such as not allowing file transfers to occur over instant messenger applications or identifying specific high-availability needs at certain times. One of the biggest challenges Gillis has witnessed at this stage can be more political than technological.

"I hate to say to form a committee, but at some point, someone is going to have to own the project, preferably an executive with some visibility. It's such a dark and highly distributed, nondocumented world, so unless you can get credibility, sponsoring a project is often a difficult task," Gillis notes. "Get the audit done. Get compliance onboard and put a plan in place. Make sure it aligns within any compliance within your organization. For publicly traded companies, that's SOX, and for retailers, it's PCI—both with strict requirements involving IT governance. Make sure everything maps back to an IT strategy throughout the entire company."

The benefits of virtualizing FTP services reach far beyond file transfer. Hardware consolidation and server footprint reduction translate into overall cost saving with lower energy costs, less hardware, fewer software licenses, and fewer patches. Gillis estimates that through well-planned virtualization, data centers can shrink by up to 50%. He says, "The best thing you gain from virtualization of file transfer is a good understanding of your environment. You get a chance to gain control over all the data that is being moved around in your company. The reason you do this is not just to cut costs but to drive your business."

Aligning Trends

If selling FTP (File Transfer Protocol) virtualization to management as a technological advance doesn't make a strong enough case for an investment, point out that the trend toward virtualization provides cost savings, as well as social responsibility as data centers are tasked with becoming greener. The benefits include:

- Fewer physical servers
- Reduction of software licenses
- Less time spent on maintenance, upgrades, and patching
- Decreased demand for power and cooling

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SIX QUICK TIPS

Buying Data Center Racks & Furniture

Some Expert Advice On Planning Your Next Data Center Upgrade

by Kurt Marko

• • •

Outfitting a computer room with the racks and hardware necessary to accommodate the typical array of servers, storage, and switches could hardly be more different from home furnishing—form and function take precedence over style and fashion. Data center managers must be ruthlessly disciplined to get the most out of their furnishing dollars, ensuring that equipment, cabling, and ergonomic requirements are met while not wasting money on bells and whistles that add little value. Experts offer a number of buying and planning suggestions for IT managers furnishing a new facility or retrofitting an existing room.

Maintain Hot- & Cold-Air Separation

Modern data centers use a hot aisle/cold aisle design to maintain proper temperature control on today's increasingly power-hungry servers. Because virtually all rack-mounted equipment uses front-to-back ventilation, it's important to design equipment racks and cabinets to facilitate this airflow. According to Peter Sacco, president of PTS Data Center Solutions (www.ptsdcs.com), some cabinets are not well-sealed and allow chilled air to leak around the sides and through unused rack positions. He advises buyers to look for models with baffling or inserts that maintain good hot air/cold air separation. Similarly, Sacco says that thermal considerations mean that closed cabinets should minimize airflow obstruction, so he prefers those units with heavily perforated doors and back panels.

Don't Forget Cable Management

The myriad of data and power cables needed to interconnect a cabinet full of equipment with the rest of the data center infrastructure can easily result in a tangled rat's nest. James Rankin, an infrastructure technology specialist at CDW (www.cdw.com), advises data center designers to plan cable management from the beginning—not only within a cabinet but also considering how cables will route between racks using either ceiling-mounted trays or raised-floor conduits. Sacco concurs, adding that a mass of bulky cabling is not only a problem for system maintenance and troubleshooting but can severely constrict airflow through a cabinet when they aren't tightly harnessed and cleanly routed. Both Rankin and Sacco note that buyers should factor cable management into cabinet selection because wider models, while seemingly wasting valuable data center real estate, offer more spacious and convenient environments for routing and securing cables than racks that closely adhere to the standard 19-inch width.

Ensure Structural Integrity

The density of modular blade servers and network switches, coupled with their redundant (and heavy) power supplies—often three per chassis—puts significant stress on a rack or cabinet. Because the most obvious and basic requirement of any enclosure is the physical support of equipment, Eli Hertz, president of furniture manufacturer Hergo (888/222-7270; www.hergo.com), says that buyers need to assess a cabinet's construction for robustness, structural integrity, and durability. He finds that some racks just aren't built to handle heavy blade servers, network routers, or UPSes—a particular problem because he sees some customers mounting several 100-pound-plus units in one rack. For example, Hergo's 11-gauge steel Saturn cabinet can support up to 1,400 pounds, while an extruded aluminum frame from Rackmount Solutions (972/272-6631; www.rackmountsolutions.net) can hold up to 1,500 pounds on caster.

Furnishings To Avoid

Traditionally, incorporating desks and workstations for operators and other staff was part of a computer room's layout; however, this is now one piece of room design that should be avoided. According to CDW's Rankin, it's not wise to make the data center floor a regular workplace. Aside from ergonomic problems—computer rooms are invariably cold and noisy places—the more people in a data center, the more opportunity for mishaps, whether it's accidentally hitting a power switch to inadvertently unplugging a critical network cable. Rankin's philosophy is that all systems management should be done remotely, a defensible stance now that PDU, UPS, and even in-row cooling units can easily be remotely controlled. According to Rankin, the only time IT staff should be in the data center is when they're installing equipment. "If you're not holding a screwdriver, you don't need to be in there." P

BONUS TIPS

■ **Don't forget power distribution.** A key consideration when selecting racks or cabinets is the mode of power distribution within the enclosure. PDU designs come in two flavors: either so-called 0U models, where the power strip is mounted vertically within the enclosure, with electrical receptacles positioned along the sides, or 0.5U designs in which the power strips are mounted horizontally in a rack position typically below the servers. Most experts now prefer the 0U design, although James Rankin, an infrastructure technology specialist at CDW (www.cdw.com), cautions this may limit your selection of cabinets and PDUs because there isn't a universal standard for 0U mounting.

■ **Take a holistic approach to room design.** Rankin notes that specifying system enclosures is but one aspect of data center design and planning—power, cooling, cabling, and server requirements also need to be factored into the plans. Peter Sacco, president of PTS Data Center Solutions (www.ptsdcs.com), concurs, stressing that a systematic approach be used when planning a new installation—cabinetry needs to be a contributing element of a room's overall thermal design. He also cautions that integration problems when using heterogeneous components from several vendors shouldn't be discounted and is an area where experienced consultants can pay dividends.

Easiest To Implement:

Where To Start

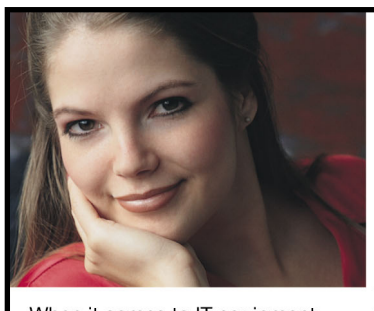
Dealing with the intricacies of cabinet components and assorted accessories can easily overwhelm even the most experienced IT pro. Eli Hertz, president of furniture manufacturer Hergo (888/222-7270; www.hergo.com), advises buyers to look for vendors that have skilled, experienced sales people who will take the time to understand your needs and put together a detailed plan and quote. He takes pride in pointing out that Hergo's sales engineers develop detailed AutoCAD drawings of a customer's floor plan that precisely illustrate a room's eventual layout and equipment placement. Hertz believes it's best to put the planning and design effort up front and ensure the customer has the right equipment from the start. He notes that purchasing a roomful of racks and cabinets results in the delivery of a few thousand pounds of steel—any mistakes in design, configuration, or ordering can not only be inconvenient but also costly to remedy.

Best Tip:

Consider Integrated Solutions

One of the challenges in designing a new computer room is ensuring that structural components fit together. Unless you're an expert and conversant in the various product lines, grouping various rack, cabinet, and cable management pieces together can be daunting. One way to simplify the design process is by selecting a set of products from a single vendor who has done the integration design up front. While preintegrated product lines can reduce the implementation risk, Sacco feels that a skilled consultant can have the same effect using a heterogeneous mix of products. He notes that PTS regularly does such integration work, taking disparate systems and building prototype data center installations. He says that the company's goal is to have no surprises, adding, "You don't want to do integration on the fly."

Virtually all rackmounted equipment uses front-to-back ventilation, so it's important to design racks and cabinets to facilitate this airflow.



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WHAT'S HAPPENING

Open Source With A Twist

Untangle Offers An Alternative To Streamline Enterprise Communications

by Julie Sartain

• • •

ACCORDING TO SOURCEFORGE.NET, as of press time, there are 177,909 registered open-source projects currently available, but very few small to medium-sized enterprises are using these solutions, in spite of the fact that they are free. The problem is that acquiring and deploying these solutions is usually beyond the time and skill requirements of these business users.

Untangle (www.untangle.com), located in San Mateo, Calif., wanted to create an environment and technology that allowed SMEs to easily acquire and run the solutions they needed—an open-source product, licensed under GPLv2 (GNU General Public License version 2), that users can use for free and that also includes all updates that anyone can write new applications for.

The Untangle solution provides SMEs all the needed network applications, from anti-spam, antivirus, and intrusion prevention to Web filtering and user monitoring to routing and VPN and remote connectivity, inside a single machine, notes Dirk Morris, chief technology officer of Untangle. The single machine hosts a virtual network, where packaged-up solutions can be easily deployed and configured.

Untangle is a software product that runs on off-the-shelf hardware. A second NIC is all it takes to convert an older desktop (with a Pentium III, 512MB RAM, 20GB, and two NICs) into an Untangle Gateway server that will support an SME network. "And the software scales really well, too," says Morris. "With modern dual-core processors and 2 or 3GB of RAM, it's possible to support thousands of users."

The Challenges

In the beginning, Untangle was a tight group of unpaid engineers who were agile and working rapidly, usually with a large sense of urgency, and always pushing to the next milestone because the company depended on it. Because of the funding situation, individuals also had to overcome personal challenges to stick with the team.

The goal was to produce a best-of-breed, complex enterprise software that was easy to use and affordable. The challenges the engineers faced were four-fold: It had to be easy to acquire and function on standard Intel/AMD hardware; it had to be easy to set up with install wizards and efficient pre-config settings; it had to be easy to use with common GUI elements; and it had to be affordable to SMEs—that is, a free open-source product with affordable commercial add-ons.

Untangle invented and patented a new way of streamlining communications overhead between the modules that would perform on a single low-cost server. This first product was released at the demo show in 2005, a solution the company called "virtual pipelining."

Now, three years later, Untangle's repertoire includes the Untangle Gateway platform, a GUI, logging, reporting, and the virtual pipelining technology, which makes all of its applications work together without excessive latency or resource contention. This platform, plus 12 applications, are all open-source products and free under the GPLv2. In addition, Untangle sells commercial add-ons such as Live Support; extra applications such as PC Remote, Remote Access Portal, and Kaspersky Virus Blocker; and advanced management features such as Active Directory Connector and Policy Manager.

History & R&D

According to Morris, after two years of efforts, the beta program (and early customers) was built up enough to provide a seed-round from angel investors, which allowed the team to get paid and gave it the resources to expand. Initially, Untangle was only offered as a dedicated appliance, because with an appliance, an engineering team can control the entire environment, and appliances are easy to support.

"With the additional resources that funding allowed, we later released a software download, which could be installed on any PC and would convert it into an Untangle appliance," says Morris. "This allowed for significant growth because Untangle was much easier to try and could be acquired at no cost. This growth provided an opportunity to later secure additional funding, which allowed us to scale and expand the breadth of our product offering, which has catapulted us to the position we are in today."

The Competition

Untangle's primary competitors are companies that sell proprietary hardware appliances that are expensive, single-purpose platforms, which run far fewer applications.

"Unlike many vendors that offer software to SMBs and claim to provide enterprise solutions, a lot of these products often do not measure up," says Morris. "In many of our applications, we leverage the best open-source projects that have long histories of proven results in complex enterprise network environments, such as SpamAssassin, Snort, OpenVPN, ClamAV, iptables, Vipul's Razor, and many others." And because it's a downloadable open-source platform, Untangle is easy to try, so SMEs know what they're getting.

Future Plans

Untangle has focused mostly on security and gateway applications in its product offerings to this point because that was the SME's greatest need. However, Untangle plans to offer a full suite of IT services, including VoIP, server replacement, and backup. "We want everything that a business needs to be available in a single machine," says Morris. "SMBs don't need and can't afford to build out a costly IT infrastructure. Our plans are to offer them the same thing entirely virtualized in a single machine at a fraction of the cost."

Untangle is continually finding new technologies and solutions that SMEs need, and then it creates the products, and it packages these technologies for its platform. This allows SMEs to solve issues with no friction, at the right price. P

THREE QUESTIONS

Tri-Mag Provides Power, Filters & Chassis

Offering Flexibility For Regular Or Custom Orders

by Daniel P. Dern

COMPUTER NEWS, AND IT PURCHASING, tends to focus on components such as processors, memory, and storage. These are important, of course, but configuring and assembling racks to hold, power, and protect your servers, storage, network gear, and other IT gear calls for chassis and power-related products.

And the combination of rising power demands, rising electrical prices, heat loads from denser components, and greater overall heat production is forcing IT departments to pay more attention to energy efficiency and effective operations than they have in the past.

One company that is helping address these concerns through power-related and chassis products is Tri-Mag (559/651-2222; www.tri-mag.com). Founded in 1980, Tri-Mag specializes in the design, manufacture, and supply of computer/electronic-oriented products, including switching power supplies, DC-to-DC converters, EMI/RFI AC power filters, and open-frame and enclosed industrial rackmount computer chassis that include power supplies.

Tri-Mag's product lines include high-efficiency, small-sized switching power supplies, including Uninterruptible Switching Power Supplies, Hot Swap, and Redundant Series, as well as tabletop and desktop-oriented power supplies.

"We sell power supplies to thousands of accounts, including IT, medical equipment and test equipment, and industrial control," says Jia-Ming Li, the CEO of Tri-Mag and one of the company's three founders. "And we sell a lot of our KVM, enclosure, and other products to universities, factories, laboratories, and military who are using their own computers."

To help companies protect their electronic circuitry from line noise and interference, Tri-Mag also offers a wide array of AC line filters, ranging from general-purpose single-phase to triple-phase power line filters.

■ What are the biggest IT-related issues facing today's small to midsized enterprise?

"IT technology and equipment changes so rapidly that small and midsized companies often don't have the financial strength to change to new equipment every year, and SMBs don't have enough technical people to support their IT gear," Li notes. "Also, all this IT equipment requires a lot of energy, and this is becoming a problem. We see needs for higher-power power supplies and also ones which are more efficient than normal power supplies."

■ What should *Processor* readers know about your company's products?

"We provide both standard and custom products," says Li. "For example, because the technologies in power electronics and communications systems are continually changing, Tri-Mag takes an active role in working with customers to meet the problems associated with EMI/RFI emissions. We offer a vast range of filters exclusively designed to meet a company's systems needs."

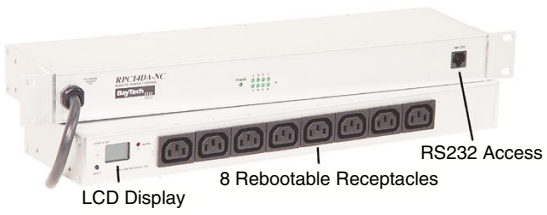
Because of the increasing energy concerns, says Li, "we have increased the efficiency and the power factor correction (PFC) on our power supplies." At the same time, Li notes, "size becomes an issue. We had to decrease the size of the power supply. We can provide smaller-sized, high-efficiency power supplies, which save energy and also, by decreasing the amount of heat they generate, reduce IT cooling requirements."

■ What makes your company unique?

"Our prices are very competitive; quality, service, and cost are the three factors we focus on to make customers happy and for company growth," Li says. "To support customer needs, we offer not just products but also service. We can turn around orders [the] next day and sometimes [the] same day. We do a lot of custom work [and] modifications of standard products and also work from scratch."

Having the machines that make Tri-Mag's chassis in-house is a big advantage, which customers appreciate because it means customization is easy. According to Li, "Our chassis department can change anything you want and do custom sheet metal enclosures very easily—any size chassis or case. We can program the computer to punch out exactly what a customer wants."

Physical Infrastructure



RPC 14

8 Receptacle Power Control and Monitoring

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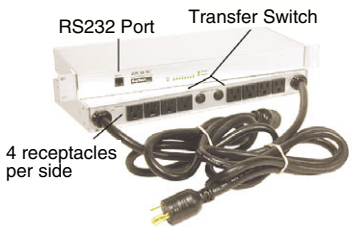
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RPC 18

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RPC 22

24 Receptacle Remote Power Monitoring & Distribution

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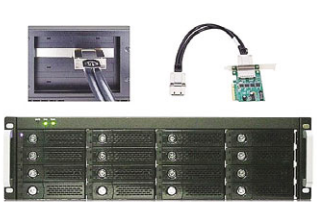
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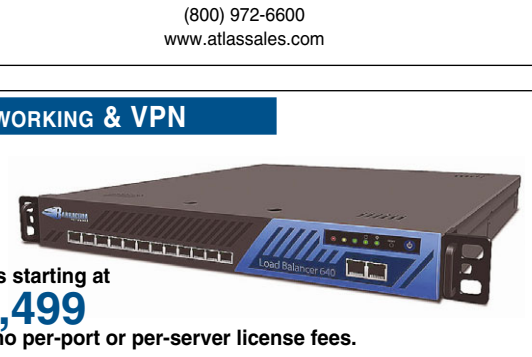
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Wi-Point 3G: Cellular & Wi-Fi Connectivity

Digi International's Router Helps Businesses Connect



Businesses are in a constant state of connectivity. The employees are connected to and through numerous networks using laptops with Wi-Fi, mobile phones, and laptops with cellular PC data cards. And many IT and data center managers are recognizing the need for an access point within business.

Digi International's Wi-Point 3G router helps ease the use of multiple wireless devices. The Wi-Point 3G is a cellular-to-Wi-Fi hotspot with VPN. It supports most cellular PC data cards, and it is easy to set up for instant wireless connectivity.

Digi designed the Wi-Point to be small and convenient. It is about 6 x 6 inches and can be easily integrated with existing wireless equipment.

The Wi-Point 3G excels in device connectivity. Cell phones are able to utilize Internet equal to and above DSL speeds. The Wi-Point also allows for easy integration between the Internet and any corporate network.

Digi has also addressed the concerns of updates and has made it even easier to keep up with the constantly changing business world. It uses updates that improve remote Wi-Fi hotspots, disaster recovery, backup, security, and mobile issues. No software is needed to run or update the Wi-Point 3G.

Wi-Point's supported interfaces include 10/100Base-T for Ethernet, 3G for cellular, 802.11b/g for Wi-Fi, and DIN connector for serial. It supports multiple network options, including DHCP server, a LAN and WLAN bridge, DMZ support, GPS, DDNS, and NTP.

The Wi-Point includes an internal firewall to help protect passing traffic. There are firmware upgrades, traffic and event logs, and a setup wizard. A list of supported wireless PC cards can be found on the company Web site.

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Clientless Security

Promisec Spectator Professional 3.3 Reports On Threats



Spec Pro 3.3 uses graphs to create a more well-rounded view of issues in the system.

Issues with productivity can make or break a company. Employees are often not the culprit when office efficiency is questioned. System downtime can be just as much a factor as too many coffee breaks.

Promisec has created the Spectator Professional 3.3 to help report on problems and ensure compliance. To help prevent downtime, remediation capabilities have been added to the software.

The Promisec Spectator software is clientless. Operating from a central point, an entire company can receive reports and risk information without performance loss. Promisec's software can also protect against human and cyber threats. Unauthorized peer-to-peer networks would be reported on and managed by preset policies. Removable storage devices would be reported on in the same fashion. With the aforementioned remote remediation, the need to physically address problems is eliminated.

Enhancements in Promisec Spectator have improved endpoint visibility, reporting, control, and utilization. Com-patibility and ease of use have also been increased. Unix/Linux and Mac OS X and newer are supported with reports made using the SSH protocol. A hotfix patch monitor has been added to point out missing patches in the system. Reports and audit data can now be saved in XML format along with other standard formats. Promisec's software also helps with audit tracking and automatically records all audit activity and presents tracking data.

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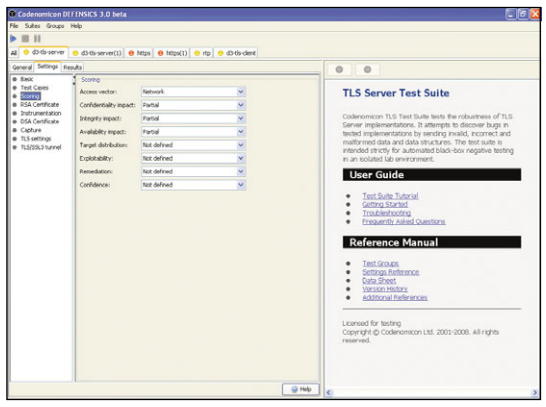


SECURITY

APRIL 18, 2008

Take Your Security Testing To A New Level

Codenomicon DEFENSICS 3.0 Finds Security Flaws Other Fuzzers Have Missed



DEFENSICS 3.0 quickly detects software vulnerabilities.

IN THE WORLD OF FUZZING, even the best can do better. Codenomicon's DEFENSICS 3.0 bundles accumulated experience from the past decade and upgrades security testing. Improving test coverage and efficiency even further than before has been a key goal in the development of DEFENSICS 3.0.

In addition to improved efficiency, DEFENSICS 3.0 introduces several enhancements in the areas of productivity, usability, and root cause analysis. It's also easier to integrate with customer testing frameworks and test control systems. With the new DEFENSICS 3.0 tests, users can both extend the testing capabilities from what is offered by default and also enjoy an improved out-of-the-box experience.

The Test Case Editing feature provides a targeted approach for testing highly specific protocol areas, whereas the Instrumentation Script Library feature enables additional means for monitoring and controlling the system under test and test execution itself. A complete rewrite of the GUI provides a dashboard view with full control over multiple test runs with multiple protocols and file formats. Advances in reporting, as well as the adoption of industry standard scoring mechanisms such as CVSS and CWE, aid in assessing the severity and root cause of any found problems.

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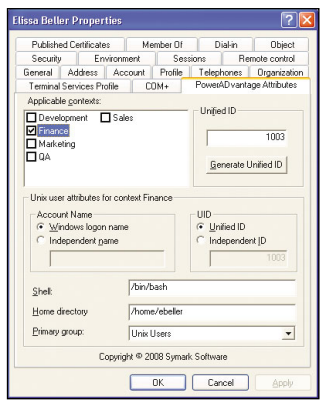
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SECURITY

APRIL 18, 2008

Active Directory, Meet Unix & Linux

Symark PowerADvantage Offers Integrated Authentication & Configuration



The PowerADvantage admin console lets users remotely alter contexts, account names, UIDs, and more.

MANY ORGANIZATIONS rely on Microsoft's Active Directory to handle authentication requests. But because it can't manage Unix and Linux, organizations have had to rely on alternate methods of authentication.

PowerADvantage is an integrated authentication and configuration utility from Symark that brings Unix and Linux systems all the benefits of Active Directory, including centralized authentication, account access, policy enforcement, and infrastructure management. PowerADvantage joins the Unix/Linux host to the domain and configures it to route authentication requests through the PowerADvantage agent, which communicates with the Active Directory domain controllers to process requests.

PowerADvantage lets administrators maintain a unified login and password for all machines. For each host, the offering also lets users adjust the Group Policy Objects and change the PowerADvantage Context to reset the login for any host. PowerADvantage is minimally disruptive, so users can make changes without having to reboot systems or restart the agent. Admins can make configuration changes through Group Policy to avoid having to apply changes to each host.

All identity data is stored within Active Directory, eliminating the need to save redundant identity data elsewhere. PowerADvantage also produces detailed compliance reports to help organizations adhere to regulations.

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STORAGE

APRIL 25, 2008

Data Storage & Security

Sentio HD 8000 Series Helps IT Personnel Face The Challenge

AS YOUR ORGANIZATION grows, so does the need for data storage and security, which is a challenge network administrators and IT managers face daily. To help network administrators deal with this issue, Revinetix has released the Sentio HD 8000 Series.



The Sentio HD 8000 Series features two models: the Sentio HD 8 - 26250 and the Sentio HD8 - 35000. Both use an 8U high-density, rack-mountable chassis. The Sentio HD 8 - 26250 includes a 26.25TB capacity license with 40 750GB ES (enterprise storage) SATA hard drives and 30TB of raw capacity. With a 35TB capacity license, the Sentio HD8 - 35000 offers 40 1TB ES SATA hard drives and 40TB of raw capacity.

RevOS admin software comes prebundled with both devices in the Sentio HD 8000 Series, and all major operating systems are supported by the software. The RevOS admin software provides users with automated backups all the way to desktop level for every machine connected to a network, including those connected to a VPN. Incremental backup levels are supported by the Sentio HD 8000 Series, as is client-side compression in order to capitalize on the available storage capacity. Additionally, RevOS has a running catalog database of all files saved on the backup appliance.

Xeon processors, Gigabit and Fast Ethernet controllers, dual-redundant power supplies, high-speed SATA drives, and RAID 5 technology are also included with both Sentio HD 8000 Series devices.

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The Altix® ICE Is Ready For The Growth Of Business

EVOLUTION AND change are inevitable in the world of business. The blade systems that are installed in this world are no different. The constant fluctuation in technology has to be recognized and accommodated.

SGI has filled a void with the improvements it has made to the Altix ICE integrated blade platform. With numerous enhancements, including new blade enclosures and blade options, the Altix ICE is ready to house the newest chipsets, including the latest Intel® 5400 Chipset (codenamed "Seaburg") with Dual- and Quad-Core Intel® Xeon® Processors. customizable options include memory improvements, maximization of bandwidth performance, and enhancements to the management environment.



The Altix ICE gives companies the choice to maximize performance with dual DDR InfiniBand network planes to ease the congestion of network traffic or remain budget-conscious with a single InfiniBand network plane. When choosing, companies receive a separate Gigabit connection for administrative communication to further improve the bandwidth.

SGI has made improvements to the Tempo cluster management tool. This tool allows administrators to interconnect multiple networks to increase productivity and efficiency. The Tempo also has a diskless boot function that can help start up multiple blades at once. The Altix ICE supports the SGI® ProPack library, which includes tools to simplify development and enhance system performance.

The Altix ICE also has an energy-smart design. The system can run at 90% efficiency on the 12-volt DC power supply, 87% on the blades, and 76% at the rack level.

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NETWORKING & VPN

APRIL 18, 2008

Internal Mobile Support

InterReach Office From ADC Improves Wireless Connectivity Within The Enterprise



MOBILE PHONES ARE IMPORTANT in the world of business, even if they do keep getting smaller. Companies are going out of their way to make sure that coverage and services are always available for their employees. In some cases, mobile access points are added so that reception and connection can be maximized.

The InterReach Office suite from ADC builds and improves upon the wireless experience that companies strive for. The most important physical part of the system is the GSM base station. The station is built in a compact, rack-mountable, server-like enclosure that can be easily installed by IT personnel. This station is compatible with all of ADC's InterReach products, including the InterReach Unison or the InterReach Fusion DAS (distributed antenna system). The increase in coverage can be achieved using existing Cat 5 and CATV cables.

InterReach Office can maximize efficiency and minimize network interruptions. With an all-IP architecture, it can reroute traffic to background carrier networks by using DSL and cable modem network connections.

The defining features of ADC's InterReach Office include voice and data support for all GSM bands, BSC (base station controller) functionality, local switching within the enterprise, DAS integration, and a guide to IP PBX connectivity and enterprise FMC (fixed-mobile convergence).

ADC InterReach Office

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Solving Virtualization's Pitfalls

Keeping Performance and Reliability on Your Virtual Machines

Virtualization has enormous potential to save companies money, time and space. However, like any innovation, there are bound to be a few snags and snares that prevent you from maintaining optimum performance and reliability. While virtualization promises efficiencies, it hardly guarantees performance. The anticipated evolution to large scale virtualization can only be made effective by understanding and seamlessly integrating this technology into the network. Success also hinges on the resolution of any reliability-threatening problems, like fragmentation, that will spring up.

Fragmentation 101

Fragmentation is a performance-crippling phenomenon. And, if left unchecked, it can lead to hangs, bottlenecks, freezes, crashes and total system failures.

Disk fragmentation occurs when individual files are not stored in contiguous segments. To fit space restrictions, files are broken up and scattered around the hard disk. So the file system, whether in a virtual machine or not, has to generate more I/Os to address the excessive file fragments.

Pinpointing the Problem

Without a doubt, the more I/Os generated (and multiple virtual machines only exacerbate this), the more throughput you'll need to account for in storage subsystems. Even with expansive, fully optimized SAN or RAID implementations underlying those virtual machines, poor disk performance is still regularly traced back to fragmentation.

Virtualization pundits have been cautioning for some time about the major performance hit a host operating system takes from fragmentation. Fragmentation's side effects include I/O bottlenecks and the inefficient use of resources. These are two major pitfalls along the path towards virtualization. They limit the performance and reliability of virtual machines. And server virtualization actually compounds fragmentation. A fragmented virtual disk, in the same storage system as another fragmented virtual disk all on top of a fragmented logical disk, significantly increases the amount and severity of fragmentation's symptoms for the entire architecture.

A misguided and somewhat instinctual response to fragmentation is to add more and more hardware (more hard drives, faster controllers) to fight off its effects. But this only mitigates the problem, and never solves it.

Solving Fragmentation

Diskeeper® 2008 with InvisiTasking™ technology automatically solves fragmentation in real time with absolutely zero overhead. Management and downtime are things of the past. The breakthrough of InvisiTasking allows for defragmentation to be a completely transparent background process. Only untapped resources are used, so applications are never interrupted. Having Diskeeper running on your virtual machines eliminates I/O bottlenecks and ensures resources are used more efficiently.



Combining virtualization's economical resource use with Diskeeper's transparent system enhancements leads to maximum productivity. Diskeeper will purge your system of performance-wrecking fragmentation. Your systems, virtualized or not, will run with unparalleled performance and superior resource efficiency.

The move to virtualization saves money and strategically allocates resources. Putting Diskeeper 2008 on your volumes is vital for a problem-free virtual infrastructure.

See for yourself, download and try Diskeeper 2008 free for 45 days at **www.diskeeper.com/vm**.

Note: This special 45-day trialware is only available at www.diskeeper.com/vm.



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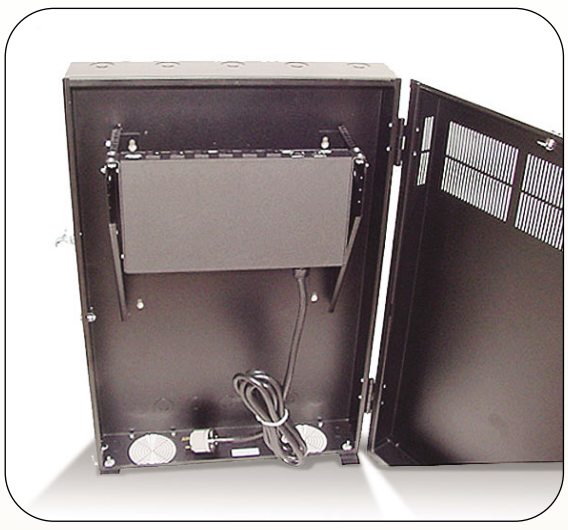
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